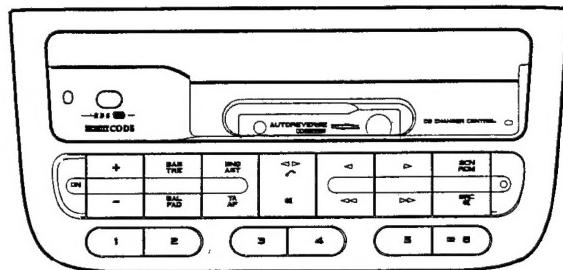


Service  
Service  
Service



For repair information of the cassette deck see Service Manual N° 4822 725 25482 of Car cassette deck SCA4.3/H

# Service Manual

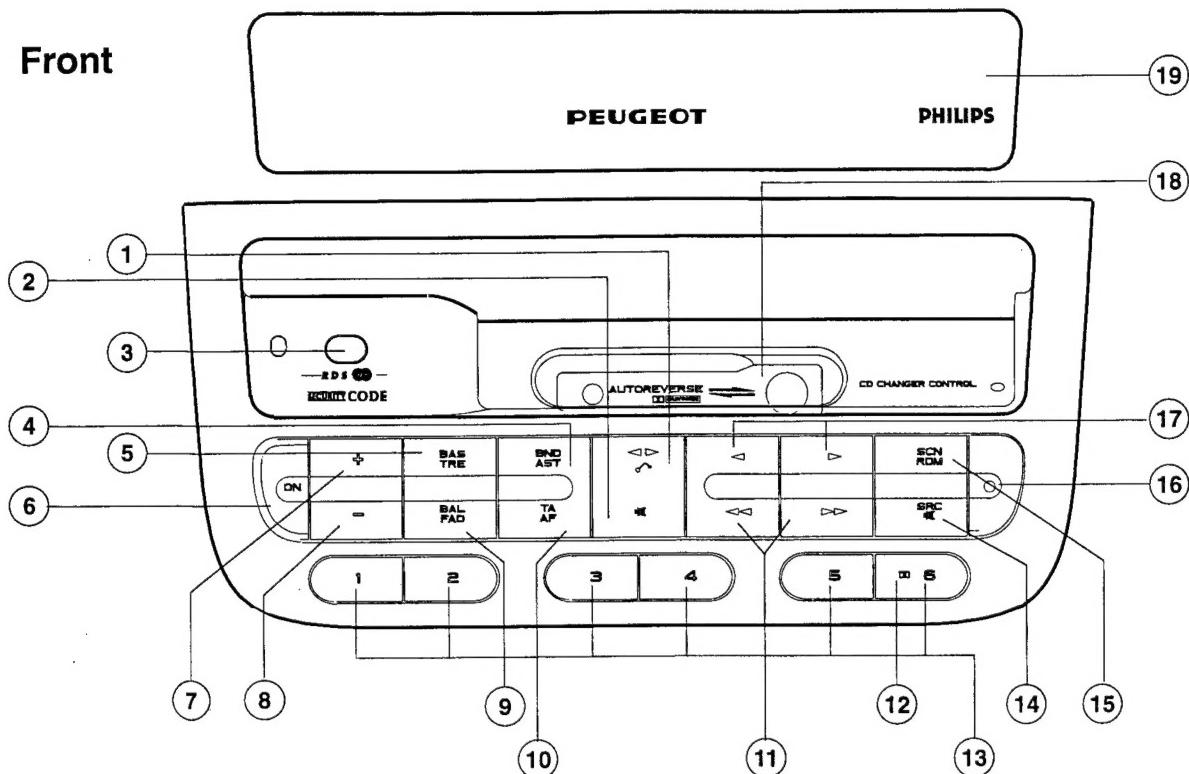


12 V

## Contents

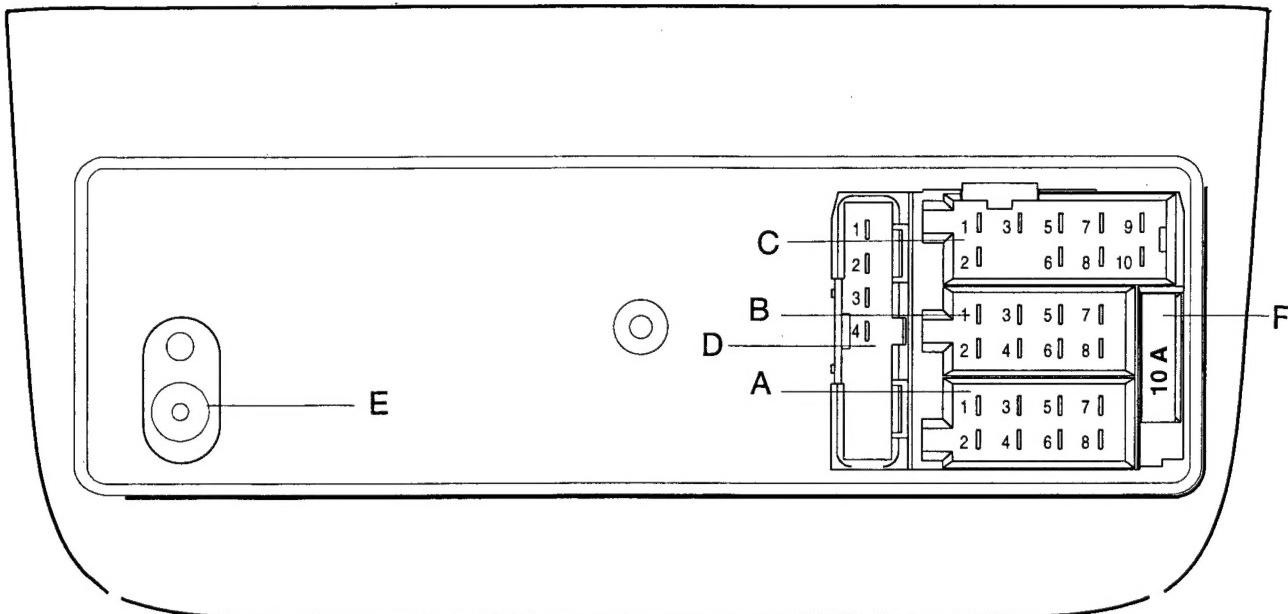
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## Front



1	REVERSE / EJECT
2	OPEN / CLOSE FRONT SHUTTER
3	SWITCH CLOSE FRONT SHUTTER
4	BAND SELECTION / AST
5	BASS / TREBLE
6	ON / OFF
7	AUDIO +
8	AUDIO -
9	BALANCE / FADER
10	TA / AF
11	AUTOMATIC SEARCH / FAST TAPE
12	DOLBY SYSTEM
13	PRESET SELECTION
14	MODE / MUTE
15	SCAN / RANDOM
16	BLINKING LED
17	MANUAL SEARCH / TAPE MSS / CD TRACK
18	CASSETTE FLAP
19	FRONT SHUTTER

## CONNECTIONS



A1	TELEPHONE MUTE	A : POWER SUPPLY
A2	VAN DATA \	
A3	VAN DATA	
A4	+ PERMANENT POWER SUPPLY	
A5	+ SWITCHED (A5 + C7 = 300 mA MAX )	
A6	+ ILLUMINATION	
A7	+ IGNITION KEY	
A8	POWER SUPPLY GROUND	
B1	REAR RIGHT +	B : LOUDSPEAKERS SUPPLY (./65X)
B2	REAR RIGHT -	GROUND
B3	FRONT RIGHT +	GROUND
B4	FRONT RIGHT -	GROUND
B5	FRONT LEFT +	OUTPUT REAR RIGHT
B6	FRONT LEFT -	OUTPUT FRONT LEFT
B7	REAR LEFT +	OUTPUT REAR LEFT
B8	REAR LEFT -	OUTPUT FRONT RIGHT
C1	BUS GROUND	C : CD CHANGER CONNECTIONS
C2	D2B +	
C3	D2B -	
C4	(NO PIN )	
C5	+ PERMANENT POWER SUPPLY = A4	
C6	POWER GROUND	
C7	+ SWITCHED ( A5 + C7 = 300 mA MAX )	
C8	LINE IN RIGHT	
C9	LINE IN LEFT	
C10	LINE IN GROUND	
C11	SHIELDING	
D1	NOT USED	D : REMOTE CONTROL (LINKED TO A5)
D2	a1 = REMOTE CONTROL 1 IN	
D3	REMOTE CONTROL	
D4	a2 = REMOTE CONTROL 2 IN	
D5	NO PIN	
D6	NO PIN	
D7	NO PIN	
D8	SHIELDING	
E	AERIAL PLUG	E : AERIAL PLUG

According to ISO/DIS 10599

## TECHNICAL DATA

### FEATURES

FM - LW - MW - RDS EON  
SCA Deck  
CD changer driver (D2B)  
Remote display (VAN)  
Security code always activated.

### CASSETTE

Cassette mechanism : SCA4.3  
Number of tracks : 2x2  
Tape speed : 4.76 cm/sec ± 2%  
Wow and flutter : < 0.3%  
Crosstalk : > 32 dB

### GENERAL

Power supply : 14.4V DC  
Dimensions : 180x150x51 mm

### AMPLIFIER

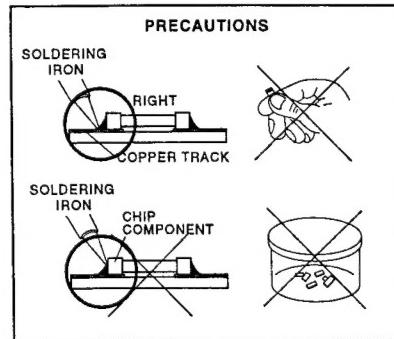
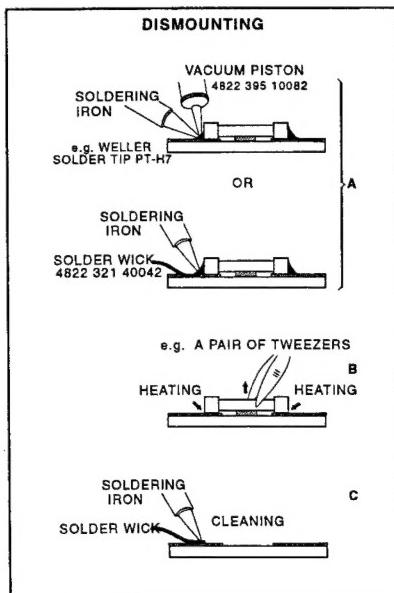
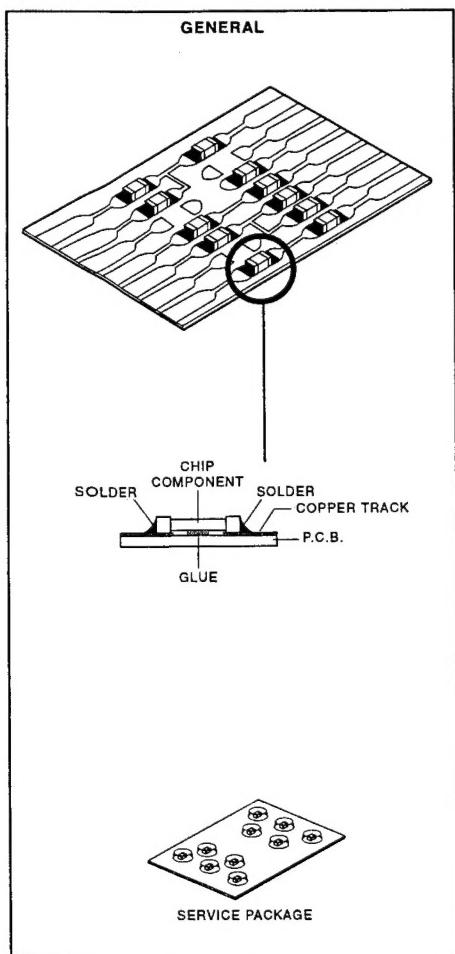
Output power : 4x10 W / 4 Ω (D = 1%) (./65X)  
4 X Line out : (./65Z)  
Fader control : >35 dB  
Balance control : >35 dB  
Bass control : +11.5dB ± 3dB  
Treble control : +10dB ± 3dB  
Channel separation : >40 dB  
Input sensibility CD in (for 1W) : 75mV ± 2dB

### RADIO

LW : 144-288 KHz  
MW : 531-1629 KHz  
FM : 87.5-108 MHz  
IF-AM (1/2) : 10.7 MHz/450 KHz  
IF-FM (1/2) : 72.2 MHz/10.7 MHz  
Sensitivity 26dB S/N : 30 µV (LW)  
: 25 µV (MW)  
: 2.5 µV (FM)  
Limitation α-3dB : 3 < 5.5 µV < 14 at T° = 25°C

-THIS SET IS USED IN COMBINATION WITH A REMOTE DISPLAY AND A REMOTE CONTROL.  
-IN CASE YOU NEED SUCH DEVICES, PLEASE CONTACT LOCALLY PEUGEOT TO GET  
INFO ABOUT THESE DEVICES AND THEIR CONNECTION CABLES.

### HANDLING CHIP COMPONENTS



### Security Code

This set is protected by a security code. This code cannot be deactivated.  
**Each time the set is disconnected you will have to enter the code.**

Entering the code: Suppose that the code is 7637

Set ON. The display shows.....

CODE

Press preset 1. The display shows.....

0---

Press UP or DOWN until the display shows.....

7---

Press preset 1 The display shows.....

70---

Pres UP or DOWN until the display shows.....

76---

and so on until the display shows.....

7637

Press preset 1 : The set beeps and starts operating.

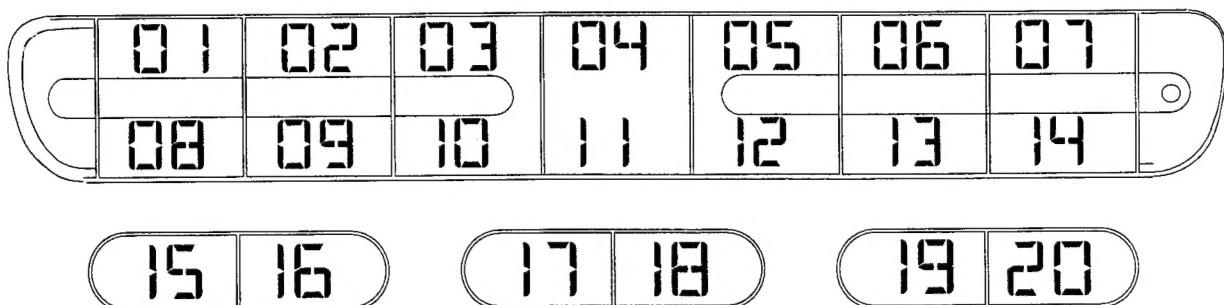
### Keyboard test

This test detects short circuits in the keyboard. If there is a short circuit, the display shows FALSE  
This test is called by turning the set on while pressing key 3.

The display shows:

PT XX

Press each key, in any order. The display will show the number of the key pressed according to the following:



When each key has been pressed, and if there is no problem, the display shows:  
Now starts the test of the remote control.

R XX

Press "MODE" on the remote control. The display shows

R 01

Press "SEARCH UP" on the remote control. The display shows

R 01

If the test is ok, the display shows

TEST OK

You can exit the test mode by switching the set OFF.

ESD



**WARNING**

All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD). Careless handling during repair can reduce life drastically.  
When repairing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance. Keep components and tools also at this potential.

## INTEGRATED CIRCUITS

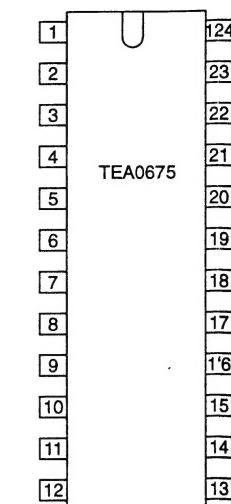
**SAA6579T Radio Data System demodulator**

SYMBOL	PIN	DESCRIPTION
QUAL	1	quality indication output
RDDA	2	RDS data output
$V_{ref}$	3	reference voltage output ( $0.5 V_{DDA}$ )
MPX	4	multiplex input signal
$V_{DDA}$	5	+5V supply voltage for analog part
$V_{SSA}$	6	ground for analog part (0V)
CIN	7	subcarrier input to comparator
SCOUT	8	subcarrier output for reconstruction filter
TCTR	9	test control
TEN	10	test enable
$V_{SSD}$	11	ground for digital part (0V)
$V_{DDD}$	12	+5V supply voltage for digital part
OSCI	13	oscillator input
OSCO	14	oscillator output
T57	15	57kHz clock signal output
RDCL	16	RDS clock output



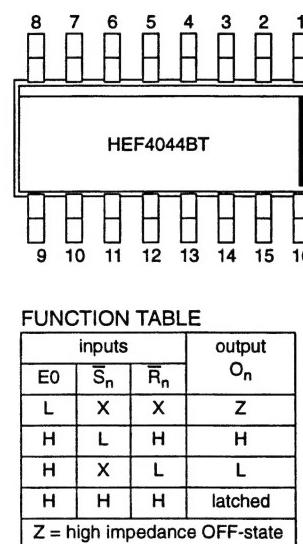
**TEA0675 Dual Dolby B-type noise reduction circuit**

SYMBOL	PIN	DESCRIPTION	SYMBOL	PIN	DESCRIPTION
OUTA	1	output channel A	INB2	13	input channel B2
INTA	2	integrating filter channel A	HS	14	headswitch input
CONTRA	3	control voltage channel A	INB1	15	input channel B1
HPA	4	high-pass filter channel A	GND	16	ground
SCA	5	side chain channel A	EQFB	17	equalizing input channel B
TD	6	delay time constant	EQB	18	equalizing output channel B
EQA	7	equalizing output channel A	AMSEQ	19	AMS output and EQ-switch input
EQFA	8	equalizing input channel A	SCB	20	side chain channel B
VCC	9	voltage supply	HPB	21	high-pass filter channel B
INA1	10	input channel A1	CONTRB	22	control voltage channel B
VREF	11	reference voltage	INTB	23	integrating filter channel B
INA2	12	input channel A2	OUTB	24	output channel B



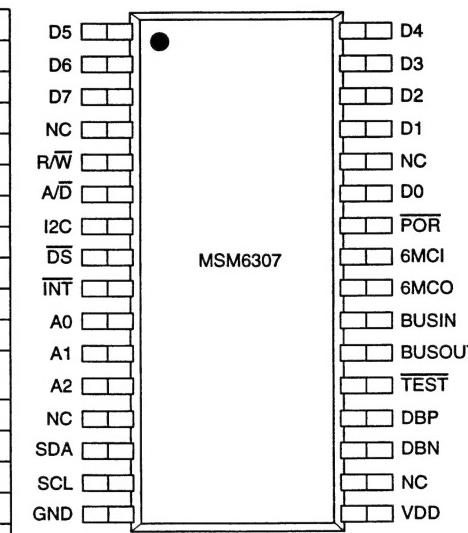
**HEF4044BT Quad R/S latch with 3-state outputs**

SYMBOL	PIN	DESCRIPTION
$O_3$	1	3-state buffered latch output 3
n.c.	2	
$\bar{S}_0$	3	set input 0 (active LOW)
$\bar{R}_0$	4	reset input 0 (active LOW)
$E_0$	5	common output enable input
$\bar{R}_1$	6	reset input 1 (active LOW)
$\bar{S}_1$	7	set input 1 (active LOW)
$V_{SS}$	8	ground
$O_1$	9	3-state buffered latch output 1
$O_2$	10	3-state buffered latch output 2
$\bar{S}_2$	11	set input 2 (active LOW)
$\bar{R}_2$	12	reset input 2 (active LOW)
$O_0$	13	3-state buffered latch output 0
$\bar{R}_3$	14	reset input 3 (active LOW)
$\bar{S}_3$	15	set input 3 (active LOW)
$V_{DD}$	16	supply



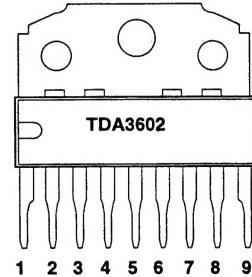
**MSM6307GS D<sup>2</sup>B IC**

SYMBOL	I/O	DESCRIPTION
POR	I	Power on - reset
R/W	I	Read / Write selector
DS	I	Data strobe to access data bus
A/D	I	Selects address or data on D0 ~ d7
SDA	I/O	$I^2C$ data signal input / output
SCL	I/O	$I^2C$ clock signal input / output
I2C	I	Selects $I^2C$ or parallel interface
INT	O	Interrupt output
BUSIN	I	D2B input (TTL level)
BUSOUT	O	D2B output (TTL level)
DBN & DBP	I/Os	Differential D2B lines of the internal driver/receiver, to be terminated with 60Ω
TEST	I	Selects the test mode for factory purposes
6MCI	I	Clock input 6MHz resonator or X-TAL
6MCO	O	Clock output 6MHz resonator or X-TAL
D0 ~ D7	I/Os	8-bit bi-directional address or data bus
A0 ~ A2	I	Programmable $I^2C$ slave addresses



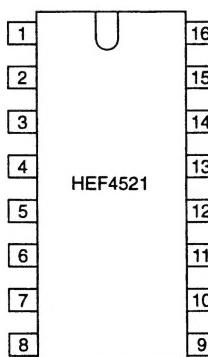
**TDA3602 Multiple output voltage regulator**

SYMBOL	PIN	DESCRIPTION
$V_p$	1	positive supply voltage
REG1	2	regulator 1 output
RESET	3	reset output
SCI	4	state control input
HOLD	5	hold output
GND	6	ground
REG3	7	regulator 3 output
$V_{bu}$	8	back-up
REG2	9	regulator 2 output

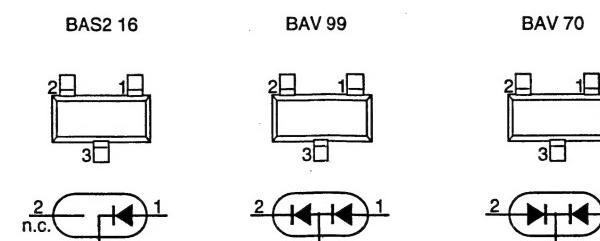


**HEF4521BP 24-stage frequency divider**

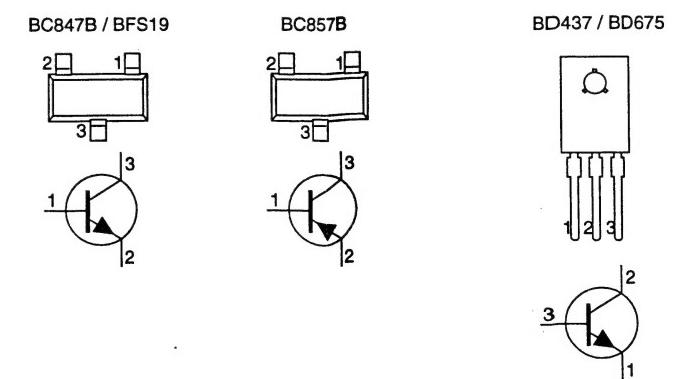
SYMBOL	PIN	DESCRIPTION
$O_{24}$	1	output $2^{24}$
MR	2	asynchronous master reset
$V_{SS'}$	3	
$O_2$	4	
$V_{DD'}$	5	
$I_2$	6	
$O_1$	7	
$V_{SS}$	8	ground
$I_1$	9	
$O_{18}$	10	output $2^{18}$
$O_{19}$	11	output $2^{19}$
$O_{20}$	12	output $2^{20}$
$O_{21}$	13	output $2^{21}$
$O_{22}$	14	output $2^{22}$
$O_{23}$	15	set input 3 (active LOW)
$V_{DD}$	16	power supply



**DIODES**



**TRANSISTORS**



## DC VOLTAGES

All measurements in FM, set tuned, 0dB at output.  
All settings in mid position. Values are given for indication only.

### **IC96 TUNER MODULE**

1 = 0.5 V	11 = 3.2 V
2 = GND	12 = 5.0 V
3 = N.C.	13 = 5.0 V
4 = N.C.	14 = 5.0 V
5 = N.C.	15 = N.C.
6 = 5.0 V	16 = 3.8 V
7 = 8.5 V	17 = 3.8 V
8 = GND	18 = GND
9 = 5.0 V	19 = N.C.
10 = 5.1 V	20 = N.C.

**7601 ST24C16**

1 = 5.0 V	5 = 5.0 V SDA
2 = 5.0 V	6 = 5.0 V SCL
3 = N.C.	7 = GND
4 = GND	8 = 5.0 V

**7602 HEF4521**

1 = N.C.	9 = GND
2 = GND	10 = N.C.
3 = 0.0 V	11 = N.C.
4 = 4.194 MHz	12 = N.C.
5 = 4.194 MHz	13 = N.C.
6 = 4.194 MHz	14 = 1 Hz □
7 = N.C.	15 = N.C.
8 = GND	16 = 5.0 V

**7257 LA2000**

1 = 1.8 V	6 = 5.0 V
2 = 7.3 V	7 = N.C.
3 = 2.1 V	8 = N.C.
4 = N.C.	9 = 8.5 V
5 = GND	

**7350 TDA8579T**

1 = 3.9 V	5 = GND
2 = 4.5 V	6 = 4.4 V
3 = 3.8 V	7 = 4.4 V
4 = 5.0 V	8 = 8.5 V

**7354 TEA6320**

1 = 5.0 V	17 = 3.7 V
2 = GND	18 = 3.8 V
3 = 4.0 V	19 = 7.6 V
4 = 3.9 V	20 = 6.0 V
5 = 3.9 V	21 = 3.9 V
6 = 3.9 V	22 = N.C.
7 = 3.8 V	23 = 3.7 V
8 = 3.5 V	24 = 3.8 V
9 = 3.8 V	25 = 3.5 V
10 = 3.7 V	26 = 3.9 V
11 = N.C.	27 = 3.9 V
12 = 7.6 V	28 = 3.9 V
13 = 6.0 V	29 = 3.9 V
14 = 3.8 V	30 = 3.9 V
15 = 3.8 V	31 = 7.6 V
16 = 3.7 V	32 = 4.9 V

**7800 TDA3602**

1 = 13.4 V	6 = GND
2 = 8.5 V	7 = 5.0 V
3 = N.C.	8 = 13.2 V
4 = 0.6 V	9 = 5.0 V
5 = 5.0 V	

**7355 SAA6579T**

1 = N.C.	9 = GND
2 = 3.1 V	10 = GND
3 = 2.5 V	11 = GND
4 = 2.5 V	12 = 4.9 V
5 = 4.9 V	13 = 4.332 MHz
6 = GND	14 = 4.332 MHz
7 = 2.3 V	15 = N.C.
8 = 2.5 V	16 = 3.5 V

**7356 TL074**

1 = 4.2 V	8 = 4.2 V
2 = 4.2 V	9 = 4.3 V
3 = 4.1 V	10 = 4.1 V
4 = 8.2 V	11 = GND
5 = 4.1 V	12 = 4.2 V
6 = 4.3 V	13 = 4.2 V
7 = 4.2 V	14 = 4.2 V

## Check and Alignment

No alignment is needed for radio part. IC96 tuner is pre-aligned.

For all measurement, please refer to "General Check & Alignment procedures for Car Systems"  
4822 725 25456, unless otherwise stated

### Dolby alignment:

cassette	adjust
MTT 150 F = 400 Hz/ 200 nWb	3260 and 3261 AC voltage at pin 1 & 24 of 7251 = 387.5 mV +/- 50mV

### Checks:

#### Supply voltages (set Off)

SET OFF	Voltage	Current + Acc ON	Current + Acc OFF	Pin 14 µP	Pin 69 µP
Acc supply	+14.4V	< 3mA		min 4.8V	
Perm supply	+14.4V	< 3mA	< 3mA	max 5.2V	max 0.8V

#### Supply voltages (set On)

device	µP	µP	µP	TDA3602	TDA3602	EEprom
pin	30 (reset)	14 (supply)	69 (hold)	9 (5V)	2 (8.5V)	8
Voltage	max 0.8V	min 4.8V max 5.2V	min 2.0V max 5.7V	min 4.8V	min 8.2V max 8.8V	min 4.8V max 5.2V

#### Reference oscillator frequencies

device	MSM 6307	µP	SAA6579T
pin	24 & 25	51 & 52	13 & 14
frequency	5.75 MHz 0.5%	11.5 MHz 0.5%	4.332 MHz 60 ppm

#### FM mute:

98 MHz 1mV	output at load resistor R & L = 775 mV = REF
no signal	output should be < -20 dB ( REF - 20 dB )

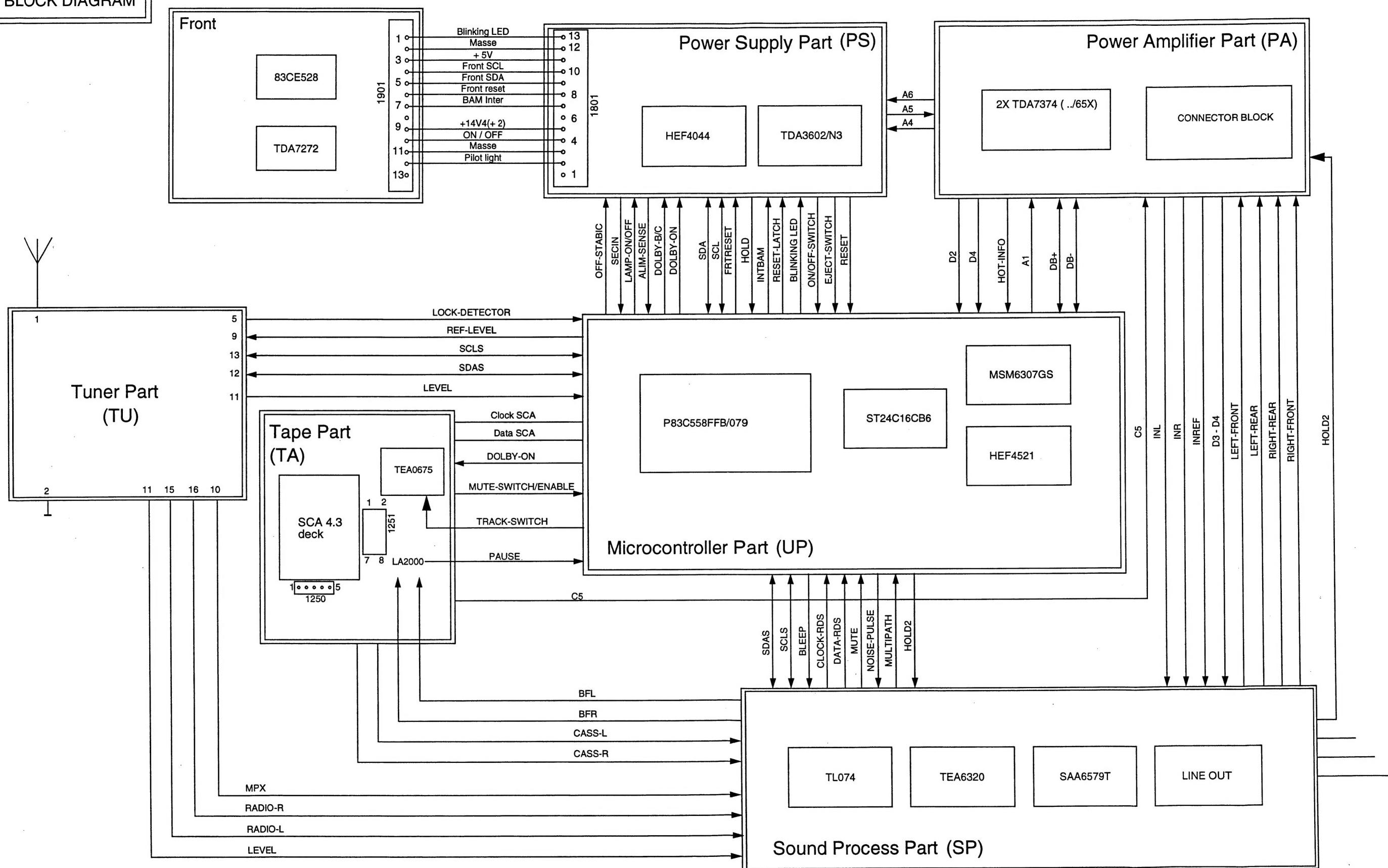
#### Demodulated FM levels

Input	Output of IC91 ( pin 16 & 17 )
98 MHz	300 mV ± 50 mV

#### Limiting point α-3dB

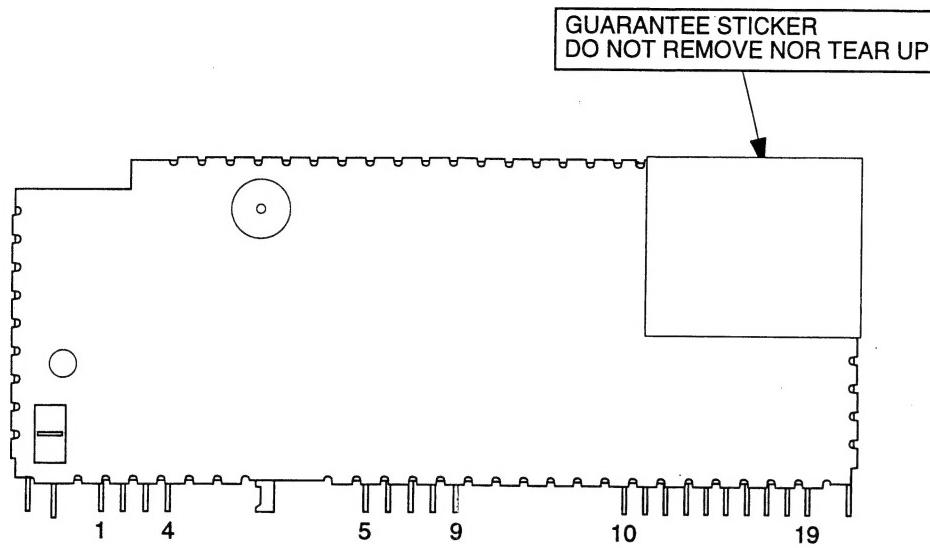
Range	Input	min	nominal	max
87.5 to 108 MHz	1mV 400Hz	3µV	5.5µV	14µV

22DC722/65X../65Z  
BLOCK DIAGRAM



## IC96 MODULE

Not repairable module. Do not open and do not try to repair yourself!



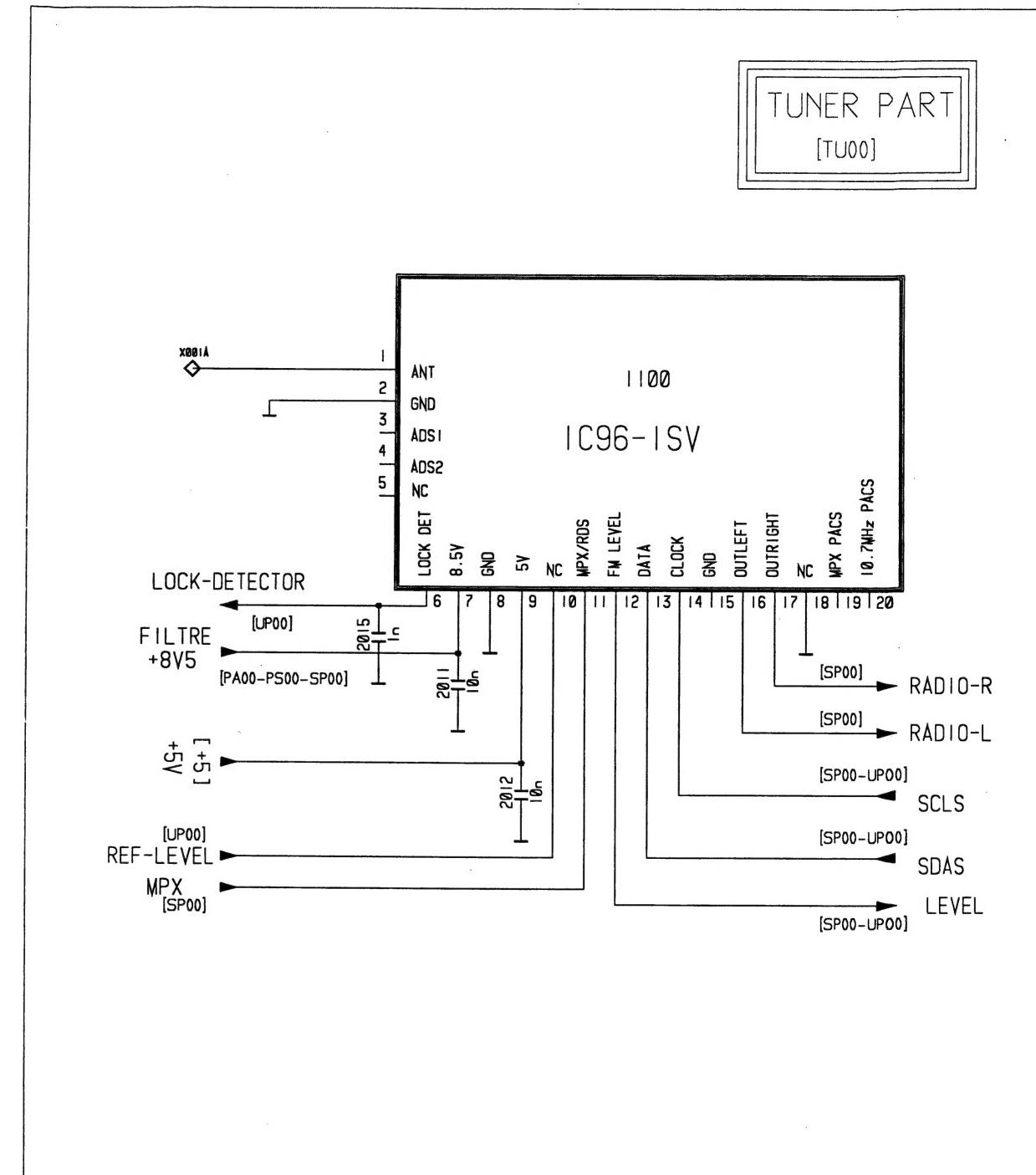
### Connections

1	AM/FM Aerial input	10	Multiplex / RDS output signal
2	Ground	11	Unweighted level output
5	Inlock detector pin	12	I <sup>2</sup> C SDA
6	Vcc 8.5V	13	I <sup>2</sup> C SCL
7	Ground	14	SDS time constant pin
8	Vcc 5.0V	17	Ground
9	V reference	19	AM audio output

### Quick reference data:

- 1) AM part
- Longwave/Mediumwave 144-1710 KHz (inclusive USA)
  - Shortwave 5850-6250 KHz - 49 meter band
  - AM double super concept
  - AM IF1 10.7MHz
  - AM IF2 450KHz
  - First VCO frequency above input signal frequency
  - Second X-tal oscillator frequency below IF1
  - Usable sensivity  $\alpha 26dB$  MW =  $14\mu V$  typ.

- 1) FM part
- FM 87.5 - 108MHz
  - FM double super concept
  - FM IF1 72.2MHz
  - FM IF2 10.7MHz
  - First VCO frequency above input signal frequency
  - Second X-tal oscillator frequency below IF1
  - Usable sensivity  $\alpha 26dB$  =  $2.5\mu V$  typ.
  - THD 1mV  $\delta f=75KHz$  =  $0.5\%$  typ
  - Signal to noise ratio =  $65dB$  typ
  - Locktime synthetizer <2mSec



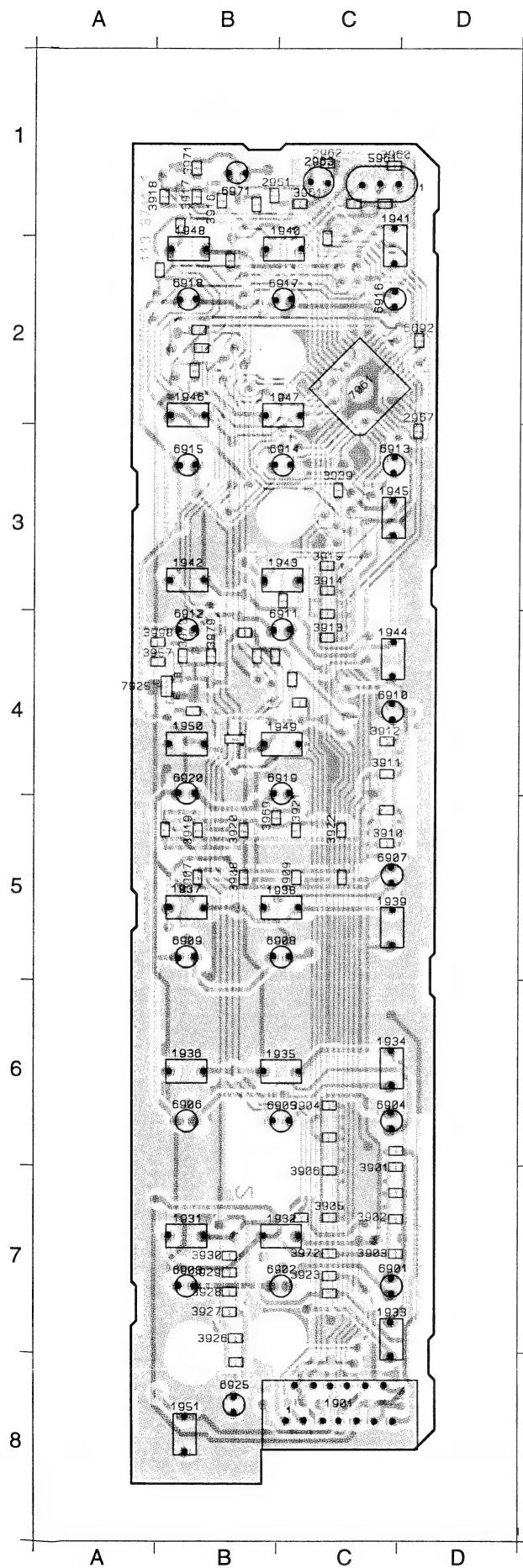
**Technician's remarks**

If you have some remarks or requests about this manual, please send them directly to:

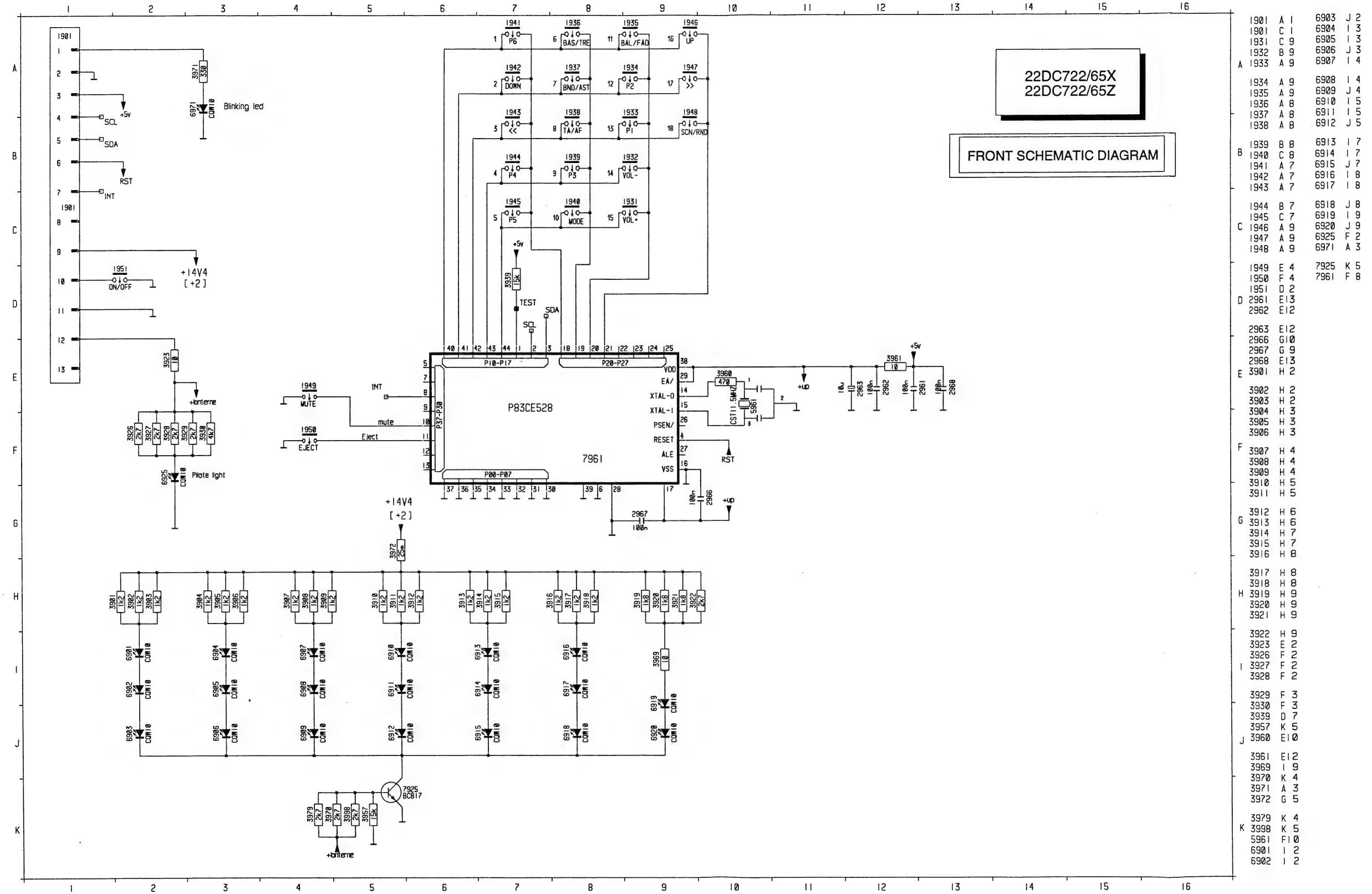
Daniel GIRIN  
Customer support Service  
Technical documentation  
BP65 - 1, rue de Clairefontaine  
78512 RAMBOUILLET CEDEX

Tel: (1) 34 83 70 00 Ext 7421  
FAX: (1) 34 83 71 77

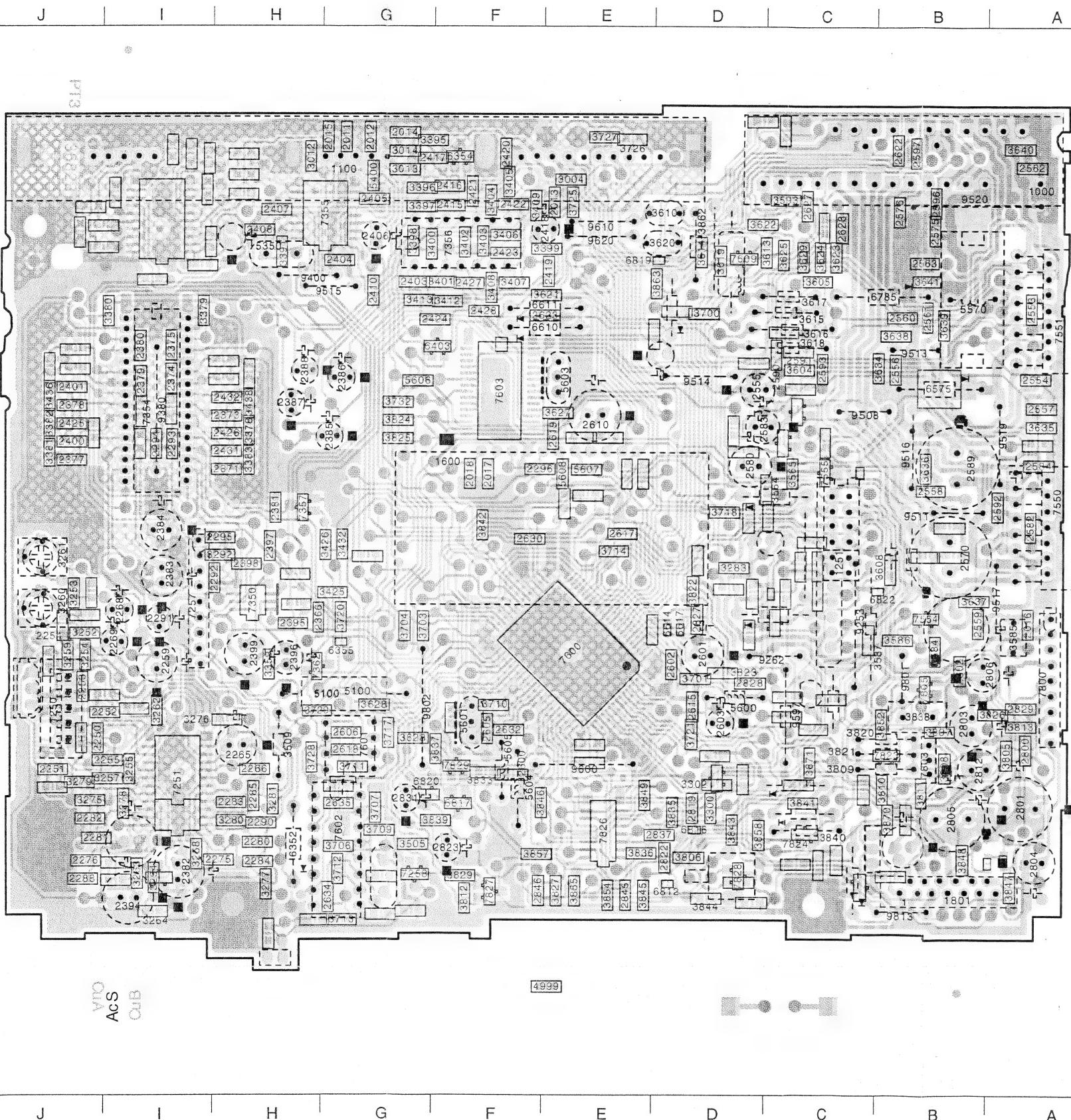
## FRONT PWB LAYOUT



1	1901	C8	2961	B1
1	1931	B7	2962	C1
1	1932	C7	2967	D3
1	1933	C7	3901	C7
1	1934	C6	3902	C7
1	1935	C6	3903	C7
1	1936	B6	3904	C6
1	1937	B5	3905	C7
1	1938	C5	3906	C7
1	1939	C5	3907	B5
2	1940	C2	3908	B5
2	1941	C2	3909	C5
2	1942	B3	3910	C5
2	1943	C3	3911	C4
2	1944	C4	3912	C4
3	1945	C3	3913	C4
3	1946	B2	3914	C3
3	1947	C2	3915	C3
3	1948	B2	3916	B1
3	1949	C4	3917	B1
4	1950	B4	3918	B1
4	1951	B8	3919	B5
4	2963	C1	3920	B5
4	5961	C1	3921	C5
4	6901	C7	3922	C5
5	6902	C7	3923	C7
5	6903	B7	3926	B7
5	6904	C6	3927	B7
5	6905	C6	3928	B7
5	6906	B6	3929	B7
5	6907	C5	3930	B7
5	6908	C5	3939	C3
5	6909	B5	3957	B4
5	6910	C4	3960	C1
5	6911	C4	3961	C1
6	6912	B4	3969	C5
6	6913	C3	3970	B4
6	6914	C3	3971	B1
6	6915	B3	3972	C7
6	6916	C2	3979	B4
7	6917	C2	3998	B4
7	6918	B2	6692	D2
7	6919	C4	7925	B4
7	6920	B4	7961	C2
7	6925	B8		
8	6971	B1		



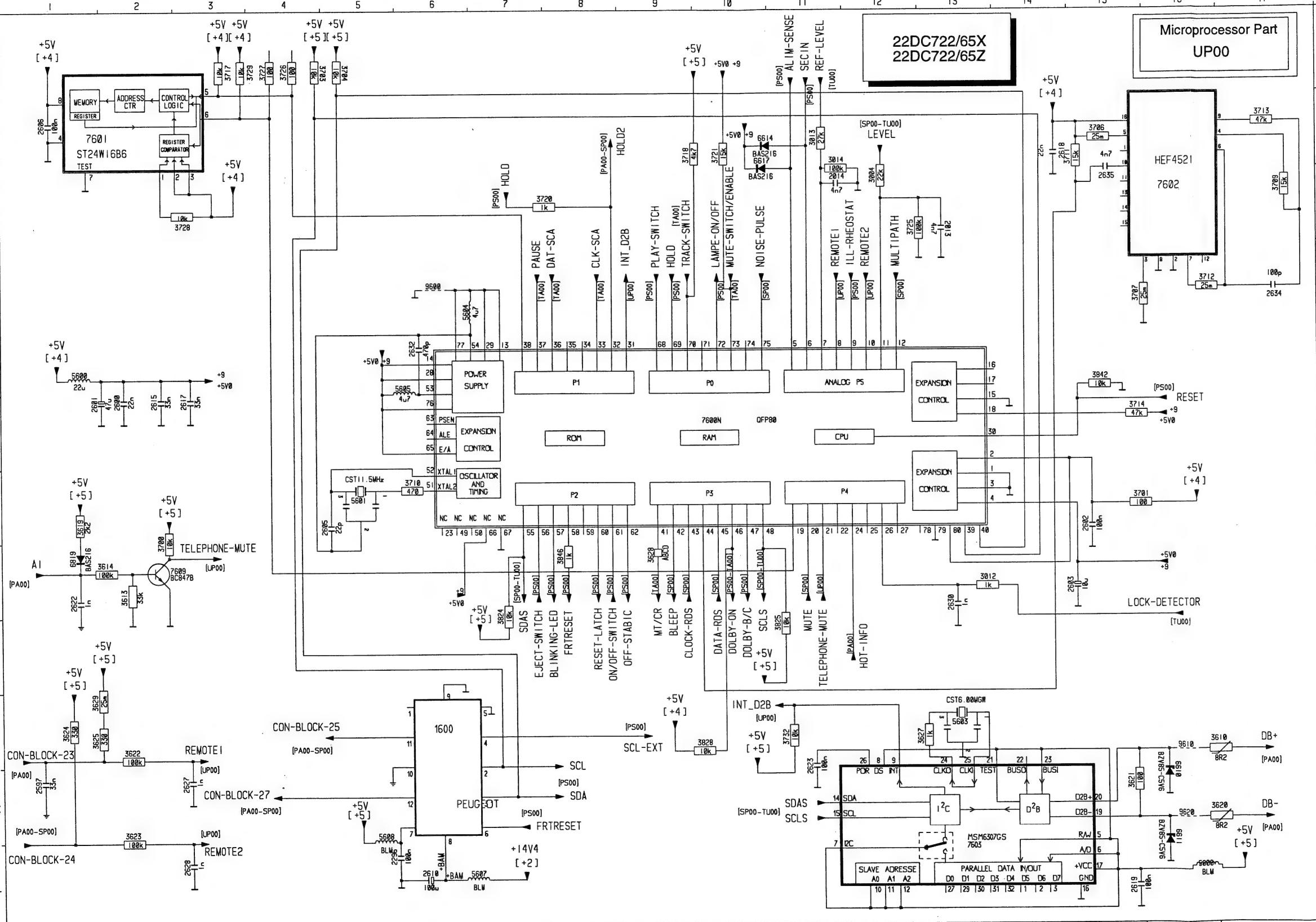
1000 A 8 2265 H 3 2385 G 5 2406 G 7 2601 D 3 2806 B 3 3585 A 4 3809 B 2 5350 H 7 6352 H 2 7550 A 5 9262 C 3 9515 G 7 9610 E 7  
 1100 G 8 2268 I 4 2386 G 6 2418 E 7 2603 D 3 2812 B 2 3610 D 7 3820 B 3 5570 B 7 6610 E 6 7551 A 7 9380 I 6 9516 B 5 9620 E 7  
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 1801 B 1 2383 I 4 2396 H 3 2583 D 6 2804 A 2 3261 J 4 3618 C 6 3862 D 7 5604 F 2 7354 I 6 7803 B 3 9513 B 6 9597 C 3  
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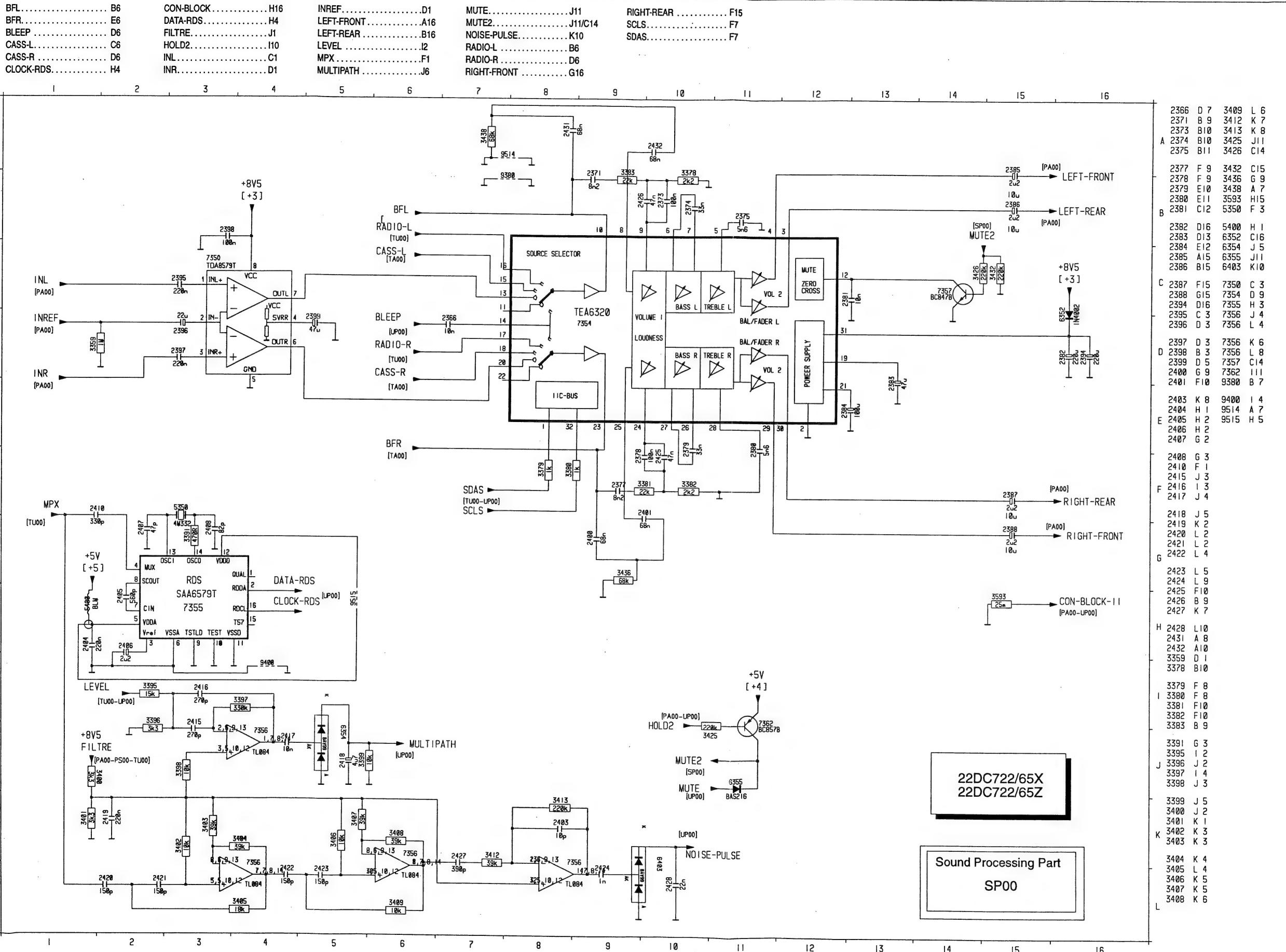


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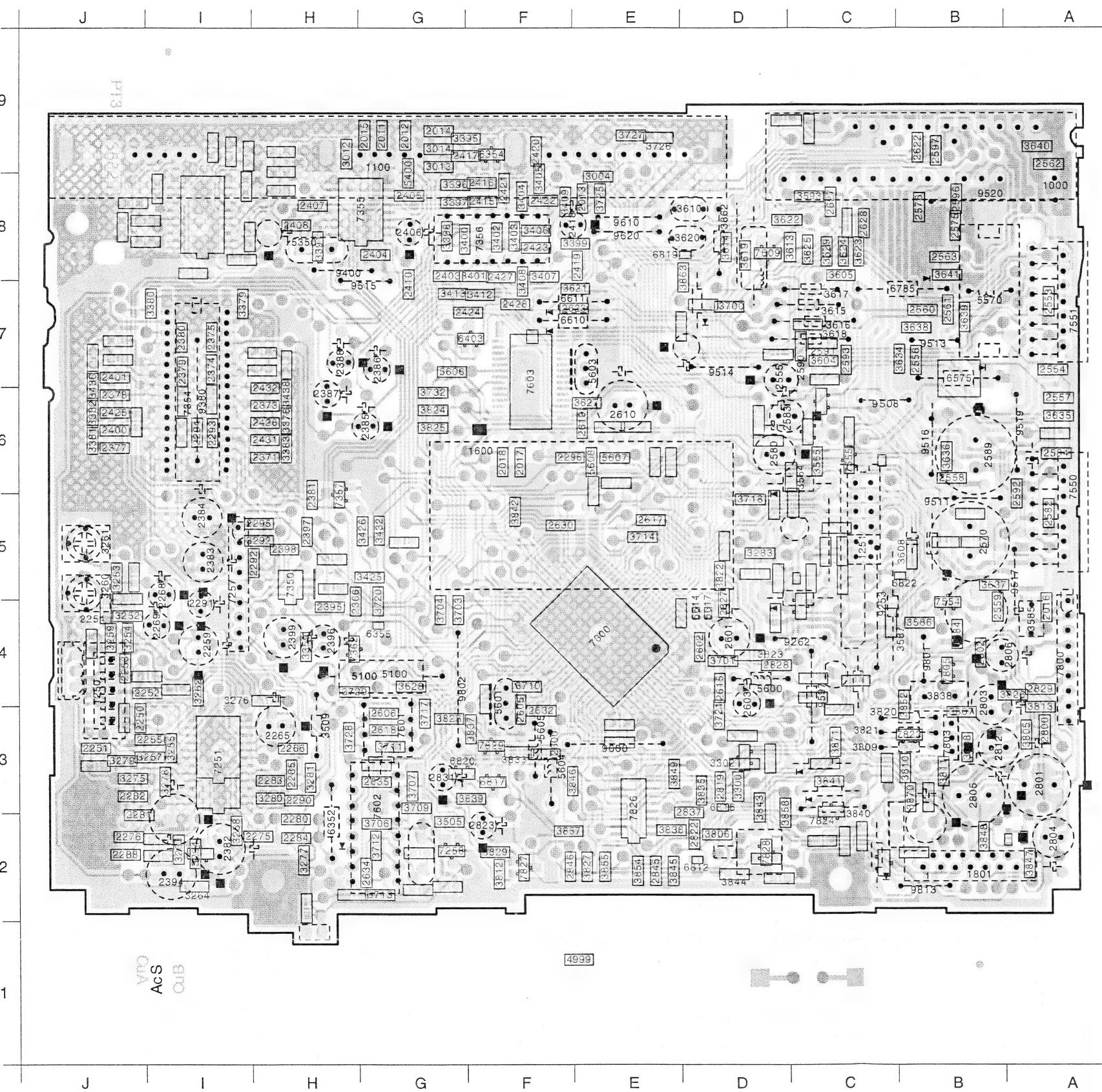
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2015 G 8	2591 C 6	3407 F 7	3833 F 2
2016 A 4	2592 A 5	3408 F 7	3835 D 2
2017 F 5	2593 C 6	3409 F 8	3836 E 2
2018 F 5	2596 B 8	3412 F 7	3837 F 3
2250 J 3	2597 B 8	3413 G 7	3839 F 2
2251 J 2	2600 F 2	3425 G 4	3841 C 2
2252 I 3	2602 D 3	3426 G 4	3842 F 5
2253 J 3	2605 F 3	3432 G 4	3843 D 2
2254 J 4	2606 G 3	3436 J 6	3844 D 1
2255 I 3	2615 D 3	3438 H 6	3845 E 1
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2275 H 2	2618 G 3	3564 C 5	3847 A 1
2276 J 2	2619 E 5	3565 C 5	3848 B 2
2280 H 2	2622 B 8	3584 B 4	3849 E 2
2281 J 2	2623 E 7	3586 B 4	3852 B 3
2282 J 2	2627 C 8	3587 C 4	3854 E 1
2283 H 2	2628 C 7	3593 C 8	3855 E 1
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2285 H 2	2632 F 3	3605 C 7	3858 D 2
2288 J 1	2634 G 1	3608 B 4	3863 D 7
2290 H 2	2635 G 2	3613 C 7	3870 B 2
2292 H 4	2800 A 3	3614 D 7	3871 C 3
2293 I 5	2802 B 3	3619 D 7	4999 E 1
2294 I 5	2819 D 2	3621 E 7	5400 G 8
2295 H 5	2822 D 2	3622 D 7	5606 G 6
2296 F 5	2827 D 4	3623 C 7	5607 E 5
2366 H 4	2828 D 3	3624 C 7	5608 E 5
2371 H 5	2829 A 3	3625 C 7	6354 F 8
2373 H 6	2837 D 2	3627 E 6	6355 G 4
2374 I 6	2845 E 1	3628 G 3	6403 F 6
2375 I 6	2846 F 1	3629 C 7	6575 B 6
2377 J 5	3004 E 8	3634 B 6	6614 D 4
2378 J 6	3012 H 8	3635 A 6	6617 D 4
2379 I 6	3013 G 8	3636 B 5	6812 D 1
2380 I 6	3014 G 8	3637 B 4	6816 D 2
2381 H 5	3252 J 4	3638 B 6	6817 F 2
2395 H 4	3253 J 4	3639 B 6	6819 D 7
2397 H 4	3254 J 3	3640 A 8	6820 G 2
2398 H 4	3255 I 2	3641 B 7	6822 B 4
2400 J 5	3257 I 2	3700 D 7	7251 I 2
2401 J 6	3258 I 2	3701 D 3	7258 G 1
2403 G 7	3259 J 3	3703 G 4	7350 H 4
2404 G 7	3262 I 3	3704 G 4	7355 G 7
2405 G 8	3263 I 1	3706 G 2	7357 H 5
2407 H 8	3264 I 1	3707 G 2	7362 H 3
2408 H 7	3275 J 2	3709 G 2	7554 B 4
2410 G 7	3276 H 3	3710 F 3	7555 C 5
2415 F 8	3277 H 1	3711 G 2	7600 E 3
2416 F 8	3278 I 2	3712 G 2	7603 F 6
2417 F 8	3279 J 2	3713 G 1	7609 D 7
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2420 F 8	3281 H 2	3717 G 3	7823 B 3
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2425 J 6	3302 D 2	3726 E 8	7829 F 2
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2427 F 7	3378 H 6	3728 H 3	
2428 F 7	3379 I 7	3729 H 3	
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2558 B 5	3396 G 8	3811 B 2	
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2560 B 7	3398 G 7	3813 A 3	
2561 B 7	3399 E 7	3822 D 4	
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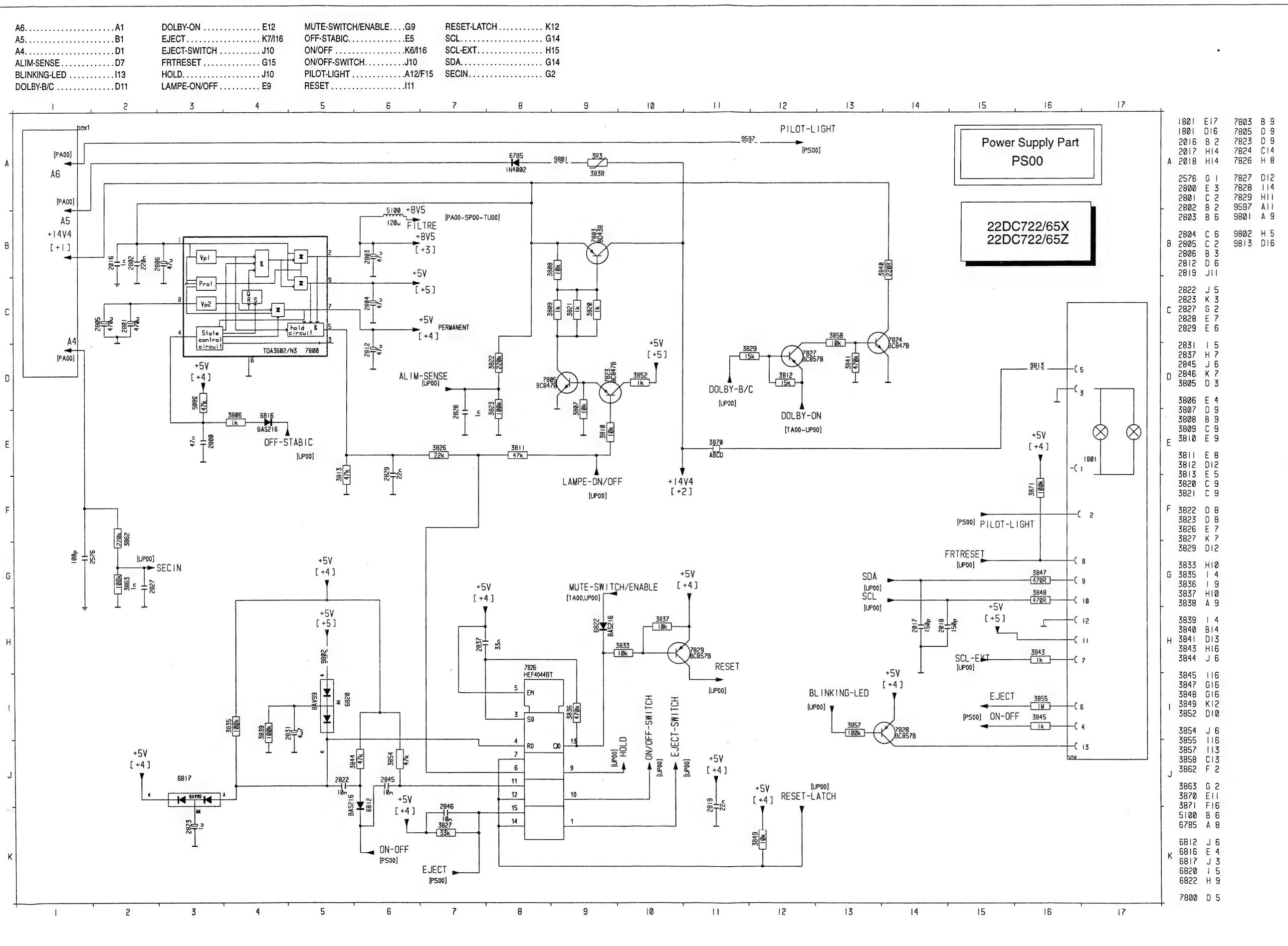
A1	H1	CON-BLOCK-23	J1	DB+	J17	HOLD	C7/D9	LEVEL	B12	NOISE-PULSE	D10	REMOTE 1	J3/D11	SCLS	H10/K11
ALIM-SENSE	A11	CON-BLOCK-24	K1	DB-	K17	HOLD2	B8	LOCK-DETECTOR	H16	OFF-STABIC	H9	REMOTE 2	L3/D12	SDA	K7
BLEEP	H9	CON-BLOCK-25	J5	DOLBY-B/C	H10	HOT-INFO	I12	MT/CR	H9	ON/OFF-SWITCH	H8	RESET	F16	SDAS	H7/K11
BLINKING-LED	H8	CON-BLOCK-27	K3	DOLBY-ON	H10	ILL-RHEOSTAT	D12	MULTIPATH	D12	PAUSE	D7	RESET-LATCH	H8	SECIN	A11
CLK-SCA	D8	DAT-SCA	D8	EJECT-SWITCH	H7	INT_D2B	D9/J11	MUTE	H11	PLAY-SWITCH	D9	SCL	K7	TELEPHONE-MUTE	H11/H3
CLOCK-RDS	H9	DATA-RDS	H10	FRTRESET	H8/K8	LAMPE-ON/OFF	D10	MUTE-SWITCH/ENABLE	D10	REF-LEVEL	A11	SCL-EXT	J9	TRACK-SWITCH	D9

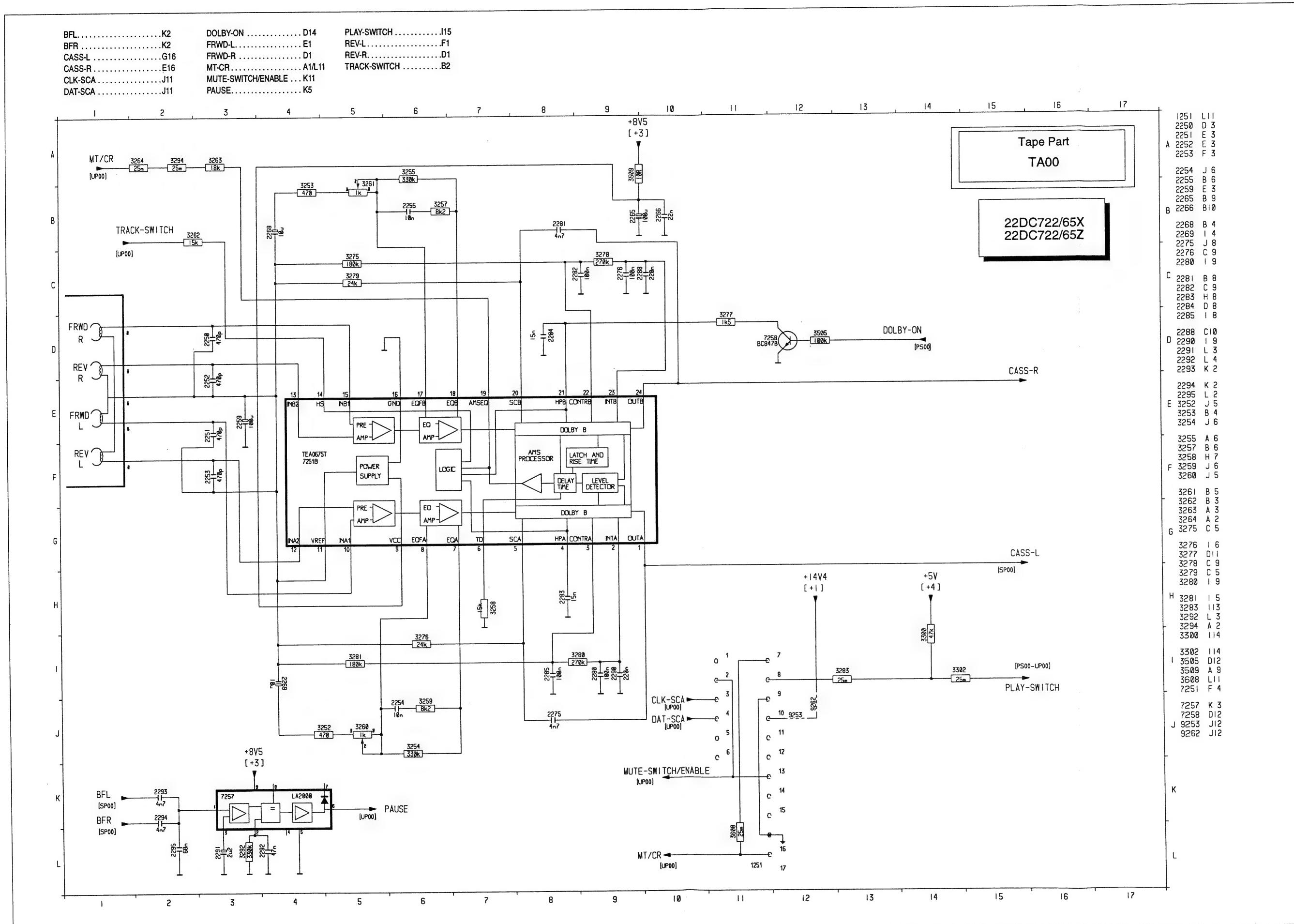


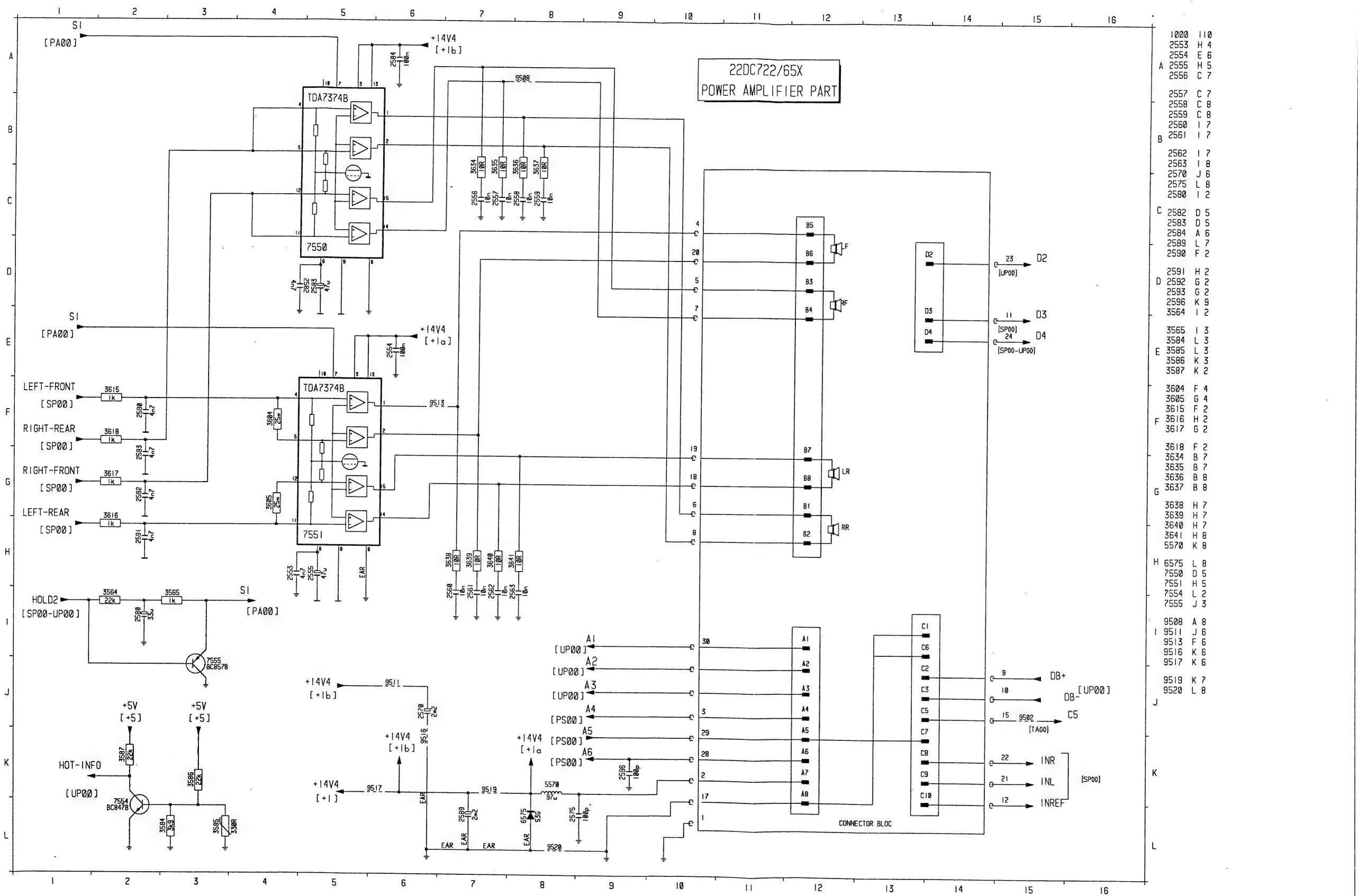


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 1251 C 4 2291 I 4 2388 H 6 2570 B 4 2801 A 2 2831 G 2 3616 C 6 3838 B 3 5601 F 3 6785 B 7 7602 G 2 9508 C 6 9519 A 5 9802 G 3  
 1600 F 5 2382 I 2 2394 I 1 2580 D 5 2803 B 3 3260 J 4 3617 C 7 3840 C 2 5603 E 6 7257 I 4 7800 A 3 9511 B 5 9520 B 8 9813 B 1  
 1801 B 1 2383 I 4 2396 H 3 2583 D 6 2804 A 2 3261 J 4 3618 C 6 3862 D 7 5604 F 2 7354 I 6 7803 B 3 9513 B 6 9597 C 3  
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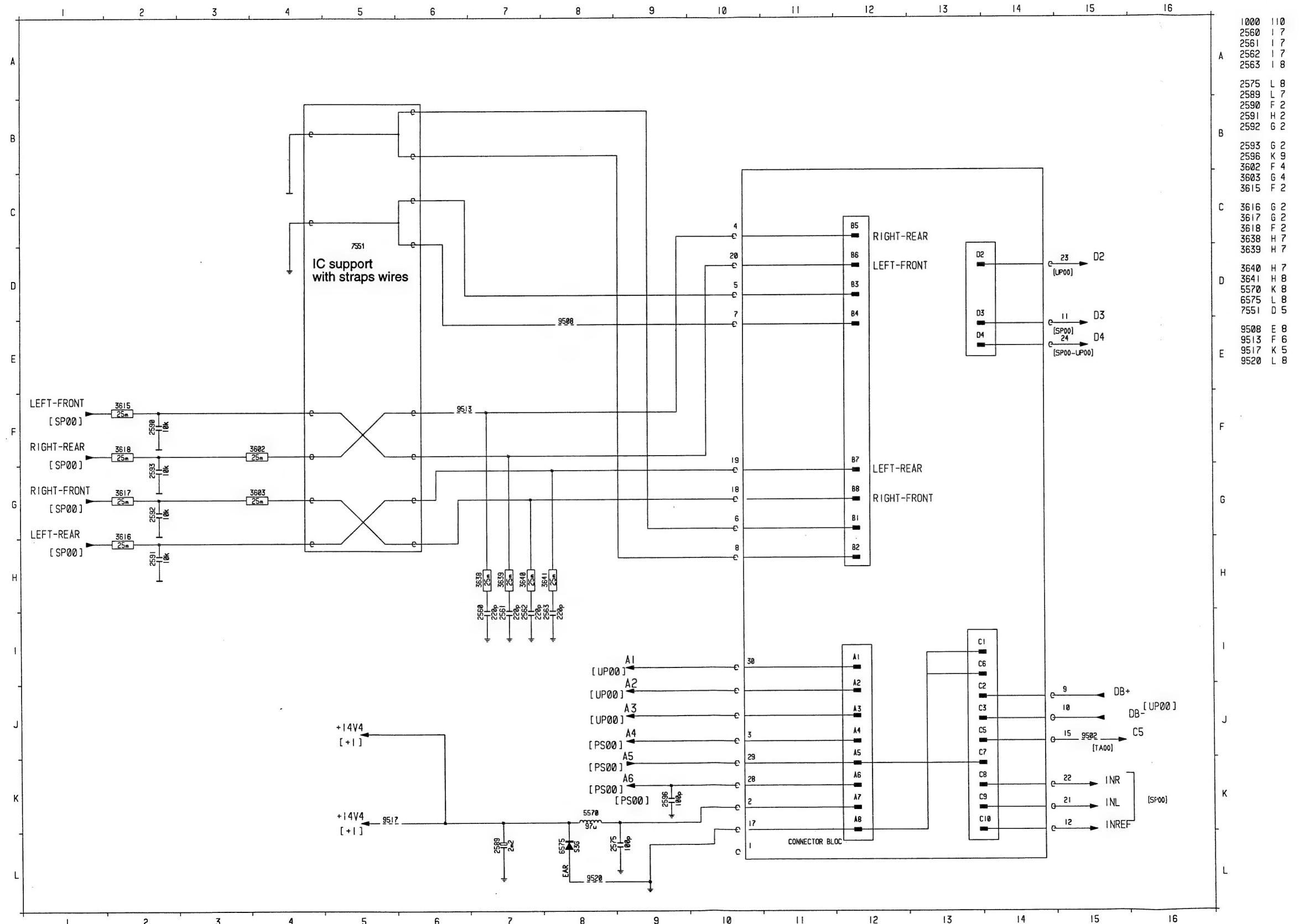




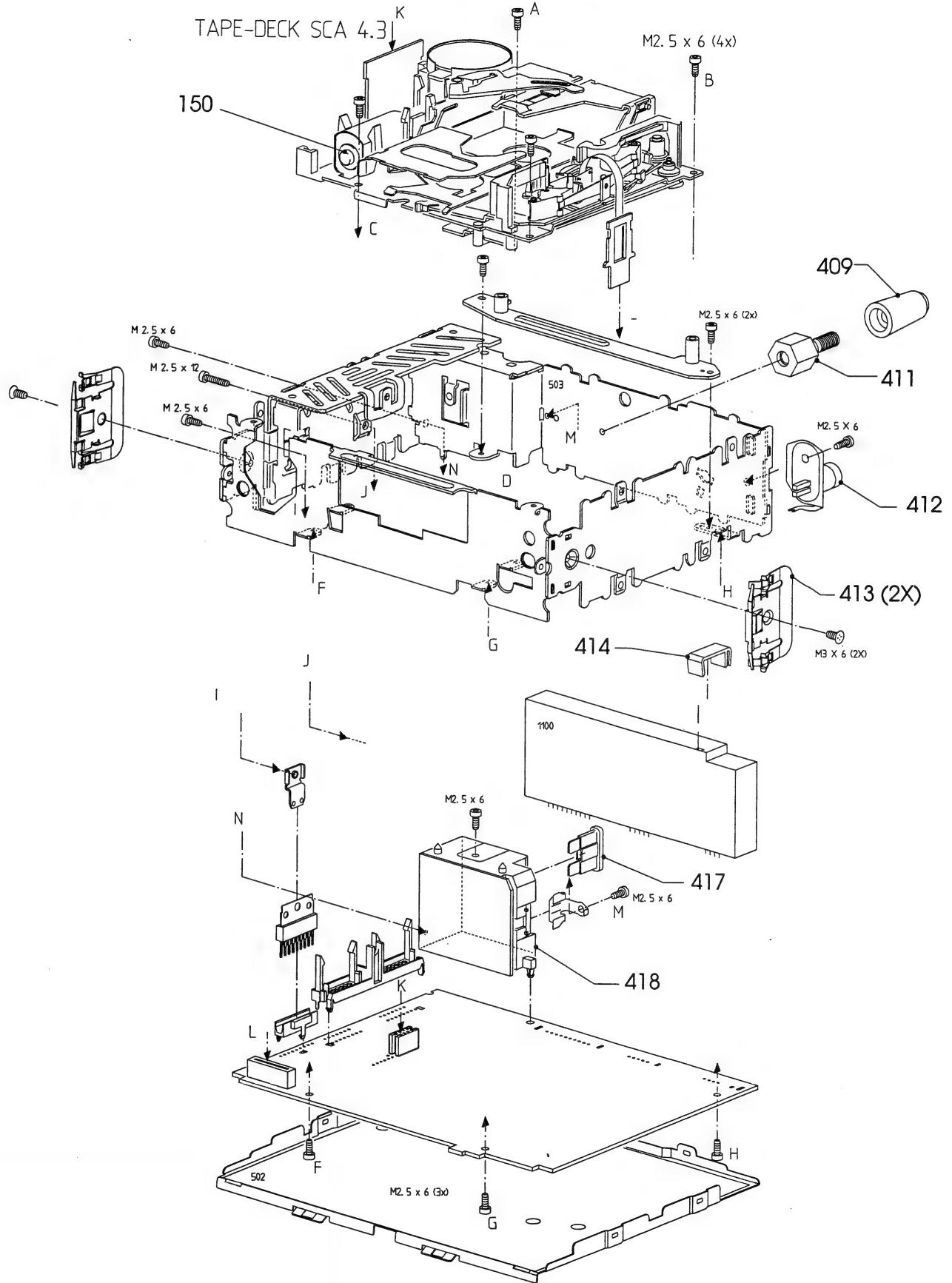
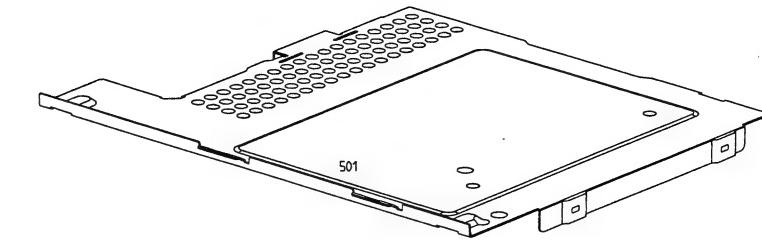
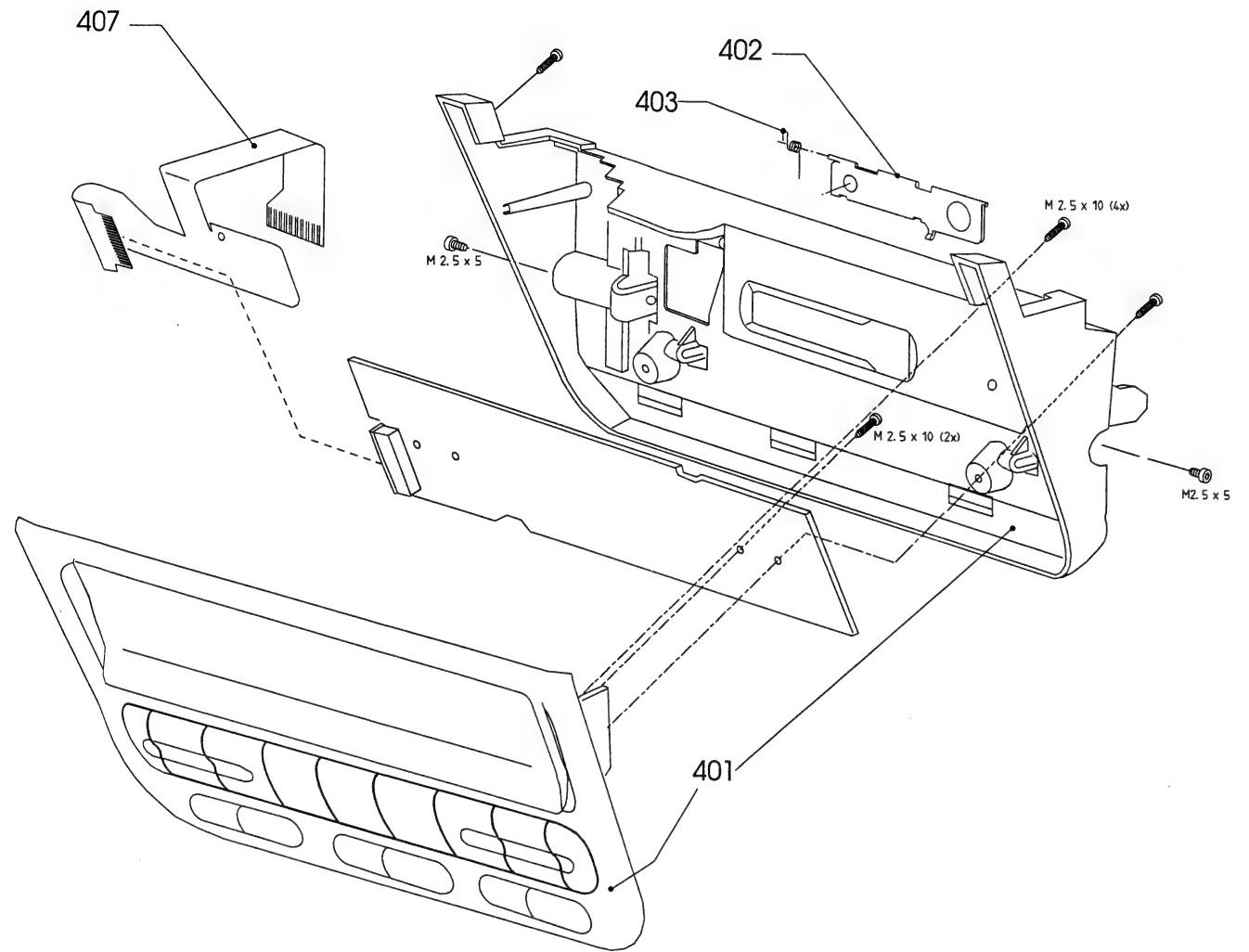


22DC722/65Z

## **POWER AMPLIFIER PART**



22DC722/65X  
22DC722/65Z



MECHANICAL PARTSLIST		
401	4822 459 05115	ORNAMENTAL PLATE (ASSY)
402	4822 443 64411	FLAP CASSETTE PRINTED
403	4822 492 42231	SPRING FLAP
407	4822 466 10683	FOIL FLEX
409	4822 532 12177	SPACER
411	4822 462 72087	SPACER METAL
412	4822 267 31702	AERIAL BUSH
413	4822 492 71523	MOUNTING SPRING
414	4822 404 21276	IC96 HOOK
417	4822 071 21003	FUSE 10A
418	4822 290 61227	CONNECTOR BLOCK
150	4822 691 10605	TAPE DECK SCA4.3/H

Miscellaneous			II		
1000	4822 290 61227	CONNECTOR BLOCK	2296	4822 126 13196	100nF 10% 0805 X7R 25V
1100	4822 214 12085	TUNER IC96 1SV	2366	5322 122 34098	10nF 10%X7R 63V
1600	4822 214 52251	THICK FILM BAM	2371	4822 126 10525	8,2nF 10%X7R 63V
1931	4822 276 13103	SKQCACD010	2373	4822 126 13196	100nF 10% 0805 X7R 25V
1932	4822 276 13103	SKQCACD010	2374	4822 126 12105	33nF 5%X7R 63V
1933	4822 276 13103	SKQCACD010	2375	4822 122 32646	5,6nF 10%X7R 50V
1934	4822 276 13103	SKQCACD010	2377	4822 126 10525	8,2nF 10%X7R 63V
1935	4822 276 13103	SKQCACD010	2378	4822 126 13196	100nF 10% 0805 X7R 25V
1936	4822 276 13103	SKQCACD010	2379	4822 126 12105	33nF 5%X7R 63V
1937	4822 276 13103	SKQCACD010	2380	4822 122 32646	5,6nF 10%X7R 50V
1938	4822 276 13103	SKQCACD010	2381	5322 122 34098	10nF 10%X7R 63V
1939	4822 276 13103	SKQCACD010	2382	4822 124 23582	220µF 10V
1940	4822 276 13103	SKQCACD010	2383	4822 124 22646	47µF 20% 16V
1941	4822 276 13103	SKQCACD010	2384	4822 124 80453	100µF 20% 10V
1942	4822 276 13103	SKQCACD010	2385	4822 124 23504	2,2µF 20% 50V
1943	4822 276 13103	SKQCACD010	2385	4822 124 41017	10µF 16V
1944	4822 276 13103	SKQCACD010	2386	4822 124 23504	2,2µF 20% 50V
1945	4822 276 13103	SKQCACD010	2386	4822 124 41017	10µF 16V
1946	4822 276 13103	SKQCACD010	2387	4822 124 23504	2,2µF 20% 50V
1947	4822 276 13103	SKQCACD010	2387	4822 124 41017	10µF 16V
1948	4822 276 13103	SKQCACD010	2388	4822 124 23504	2,2µF 20% 50V
1949	4822 276 13103	SKQCACD010	2388	4822 124 41017	10µF 16V
1950	4822 276 13103	SKQCACD010	2394	4822 124 23582	220µF 10V
1951	4822 276 13103	SKQCACD010	2395	4822 126 13057	220nF 10% X7R 25V
			2396	4822 124 23279	22µF 20% 16V
2011	5322 122 34098	10nF 10%X7R 63V	2397	4822 126 13057	220nF 10% X7R 25V
2012	5322 122 34098	10nF 10%X7R 63V	2398	4822 126 13196	100nF 10% 0805 X7R 25V
2013	5322 126 10223	10nF 10%X7R 63V	2399	4822 124 22646	47µF 20% 16V
2014	5322 126 10223	4,7nF 10%X7R 63V	2400	4822 126 13392	68nF 10% 0805 X7R 25V
2015	5322 122 34123	1nF 10%X7R 50V	2401	4822 126 13392	68nF 10% 0805 X7R 25V
2016	5322 122 34123	1nF 10%X7R 50V	2403	5322 122 32448	10pF 5% 50V
2017	5322 122 33538	150pF 2%NPO 63V	2404	4822 126 13057	220nF 10% X7R 25V
2018	5322 122 33538	150pF 2%NPO 63V	2405	5322 116 80853	560pF 5%NPO 63V
2250	5322 122 32268	470pF 10% 50V	2406	4822 124 23504	2,2µF 20% 50V
2251	5322 122 32268	470pF 10% 50V	2407	4822 126 13692	47pF 1% NPO 63V
2252	5322 122 32268	470pF 10% 50V	2408	4822 126 13695	82pF 1% NPO 63V
2253	5322 122 32268	470pF 10% 50V	2410	5322 122 31863	330pF 5%NPO 50V
2254	5322 122 34098	10nF 10%X7R 63V	2415	4822 122 33216	270pF 5%NPO 50V
2255	5322 122 34098	10nF 10%X7R 63V	2417	5322 122 34098	10nF 10%X7R 63V
2259	4822 124 80453	100µF 20% 10V	2418	4822 124 80765	4,7µF 20% 35V
2265	4822 124 80453	100µF 20% 10V	2419	4822 126 13057	220nF 10% X7R 25V
2266	5322 122 32654	22nF 10%X7R 63V	2420	5322 122 33538	150pF 2%NPO 63V
2268	4822 124 41017	10µF 16V	2421	5322 122 33538	150pF 2%NPO 63V
2269	4822 124 41017	10µF 16V	2422	5322 122 33538	150pF 2%NPO 63V
2275	5322 126 10223	4,7nF 10%X7R 63V	2423	5322 122 33538	150pF 2%NPO 63V
2276	4822 126 13196	100nF 10% 0805 X7R 25V	2424	5322 122 34123	1nF 10%X7R 50V
2280	4822 126 13196	100nF 10% 0805 X7R 25V	2425	4822 126 13343	47nF 10% X7R 25V
2281	5322 126 10223	4,7nF 10%X7R 63V	2426	4822 126 13343	47nF 10% X7R 25V
2282	4822 126 13196	100nF 10% 0805 X7R 25V	2427	4822 122 33172	390pF 5% NPO 50V
2283	4822 126 13188	15nF 5% X7R 63V	2428	5322 122 32654	22nF 10%X7R 63V
2284	4822 126 13188	15nF 5% X7R 63V	2431	4822 126 13392	68nF 10% 0805 X7R 25V
2285	4822 126 13196	100nF 10% 0805 X7R 25V	2432	4822 126 13392	68nF 10% 0805 X7R 25V
2288	4822 126 13057	220nF 10% X7R 25V	2553	5322 126 10223	4,7nF 10%X7R 63V
2290	4822 126 13057	220nF 10% X7R 25V	2554	4822 122 33496	100nF 10%X7R 63V
2291	4822 124 23504	2,2µF 20% 50V	2555	4822 124 40433	4,7 µF 6V3 20 %
2292	4822 126 13343	47nF 10% X7R 25V	2556	4822 126 13196	100nF 10% 0805 X7R 25V
2293	5322 126 10223	4,7nF 10%X7R 63V	2557	4822 126 13196	100nF 10% 0805 X7R 25V
2294	5322 126 10223	4,7nF 10%X7R 63V	2558	4822 126 13196	100 nF 10 % 0805 X7R 25V
2295	4822 126 13392	68nF 10% 0805 X7R 25V	2559	4822 126 13196	100 nF 10 % 0805 X7R 25V
			2560	4822 122 33575	220pF 5%NPO 50V

II			II		
2560	4822 126 13196	100 nF 10 % 0805 X7R 25V	2967	4822 126 13196	100nF 10% 0805 X7R 25V
2561	4822 122 33575	220pF 5%NPO 50V	2968	4822 126 13196	100nF 10% 0805 X7R 25V
2561	4822 126 13196	100nF 10% 0805 X7R 25V			
2562	4822 122 33575	220pF 5%NPO 50V	3004	4822 051 20223	22KΩ 5% 0,1W
2562	4822 126 13196	100nF 10% 0805 X7R 25V	3012	4822 051 20102	1KΩ 5% 0,1W
2563	4822 122 33575	220pF 5%NPO 50V	3013	4822 051 20273	27KΩ 5% 0,1W
2563	4822 126 13196	100nF 10% 0805 X7R 25V	3014	4822 051 20104	100KΩ 5% 0,1W
2570	4822 124 80863	2200pF 20 % 16V	3252	4822 051 20471	470 Ω 5% 0,1W
2575	5322 122 32531	100pF 5%NPO 50V	3253	4822 051 20471	470Ω 5% 0,1W
2576	5322 122 32531	100pF 5%NPO 50V	3254	4822 051 20334	330KΩ 5% 0,1W
2580	4822 124 23281	33µF 20% 16V	3255	4822 051 20334	330KΩ 5% 0,1W
2582	5322 126 10223	4,7nF 10%X7R 63V	3257	4822 051 20822	8K20 5% 0,1W
2583	4822 124 40433	4,7 µF 6V3 20 %	3258	4822 051 20153	15KΩ 5% 0,1W
2584	4822 122 33496	100nF 10%X7R 63V	3259	4822 051 20822	8K20 5% 0,1W
2589	4822 124 80863	2200pF 20% 16V	3260	4822 101 11187	1K 30%LIN 0,1W
2590</					

3419	4822 051 20008	0Ω JUMP. (0805)	3703 4822 117 10833 10K 1% 0,1W
3425	4822 051 20224	220KΩ 5% 0,1W	3704 4822 117 10833 10K 1% 0,1W
3426	4822 051 20224	220KΩ 5% 0,1W	3706 4822 051 20008 0Ω JUMP. (0805)
3432	4822 051 20224	220KΩ 5% 0,1W	3707 4822 051 20008 0Ω JUMP. (0805)
3435	4822 051 20008	0Ω JUMP. (0805)	3709 4822 051 20153 15KΩ 5% 0,1W
3436	4822 051 20683	68KΩ 5% 0,1W	3710 4822 051 20471 470Ω 5% 0,1W
3437	4822 051 20008	0Ω JUMP. (0805)	3711 4822 051 20153 15KΩ 5% 0,1W
3438	4822 051 20683	68KΩ 5% 0,1W	3712 4822 051 20008 0Ω JUMP. (0805)
3505	4822 051 20104	100KΩ 5% 0,1W	3713 4822 117 10834 47K 1% 0,1W
3509	4822 116 52176	10E 5% 0,5W	3714 4822 117 10834 47K 1% 0,1W
3564	4822 051 20223	22KΩ 5% 0,1W	3717 4822 117 10833 10K 1% 0,1W
3584	4822 051 20392	3K90 5% 0,1W	3718 4822 051 20472 4K70 5% 0,1W
3585	4822 116 40254	330R	3720 4822 051 20102 1KΩ 5% 0,1W
3586	4822 051 20223	22KΩ 5% 0,1W	3721 4822 051 20153 15KΩ 5% 0,1W
3587	4822 051 20223	22KΩ 5% 0,1W	3725 4822 051 20104 100KΩ 5% 0,1W
3592	4822 051 20008	0Ω JUMP. (0805)	3726 4822 051 20101 100Ω 5% 0,1W
3593	4822 051 20008	0Ω JUMP. (0805)	3727 4822 051 20101 100Ω 5% 0,1W
3599	4822 051 20008	0Ω JUMP. (0805)	3728 4822 117 10833 10K 1% 0,1W
3601	4822 051 20008	0Ω JUMP. (0805)	3729 4822 117 10833 10K 1% 0,1W
3602	4822 051 20008	0Ω JUMP. (0805)	3730 4822 051 20153 15KΩ 5% 0,1W
3603	4822 051 20008	0Ω JUMP. (0805)	3731 4822 117 10834 47K 1% 0,1W
3604	4822 051 20008	0Ω JUMP. (0805)	3732 4822 117 10833 10K 1% 0,1W
3605	4822 051 20008	0Ω JUMP. (0805)	3805 4822 117 10834 47K 1% 0,1W
3608	4822 051 20008	0Ω JUMP. (0805)	3806 4822 051 20102 1KΩ 5% 0,1W
3609	4822 051 20008	0Ω JUMP. (0805)	3807 4822 117 10833 10K 1% 0,1W
3610	4822 116 40221	8R2 20%	3808 4822 117 10833 10K 1% 0,1W
3613	4822 051 20333	33KΩ 5% 0,1W	3809 4822 050 21002 1KΩ 1% 0,6W
3614	4822 051 20104	100KΩ 5% 0,1W	3810 4822 117 10833 10K 1% 0,1W
3615	4822 050 21002	1KΩ 1% 0,6W	3811 4822 117 10834 47K 1% 0,1W
3616	4822 050 21002	1KΩ 1% 0,6W	3812 4822 051 20153 15KΩ 5% 0,1W
3617	4822 050 21002	1KΩ 1% 0,6W	3813 4822 117 10834 47K 1% 0,1W
3618	4822 050 21002	1KΩ 1% 0,6W	3820 4822 050 21002 1KΩ 1% 0,6W
3619	4822 117 11449	2K2 1% 0,1W	3821 4822 050 21002 1KΩ 1% 0,6W
3620	4822 116 40221	8R2 20%	3822 4822 051 20224 220KΩ 5% 0,1W
3621	4822 051 20101	100Ω 5% 0,1W	3823 4822 051 20104 100KΩ 5% 0,1W
3622	4822 051 20104	100KΩ 5% 0,1W	3824 4822 117 10833 10K 1% 0,1W
3623	4822 051 20104	100KΩ 5% 0,1W	3825 4822 117 10833 10K 1% 0,1W
3624	4822 051 20331	330Ω 5% 0,1W	3826 4822 051 20223 22KΩ 5% 0,1W
3625	4822 051 20331	330Ω 5% 0,1W	3827 4822 051 20333 33KΩ 5% 0,1W
3627	4822 051 20102	1KΩ 5% 0,1W	3828 4822 117 10833 10K 1% 0,1W
3628	4822 051 20008	0Ω JUMP. (0805)	3829 4822 051 20153 15KΩ 5% 0,1W
3629	4822 051 20008	0Ω JUMP. (0805)	3833 4822 117 10833 10K 1% 0,1W
3634	4822 051 20109	10Ω 5% 0,1W	3835 4822 051 20104 100KΩ 5% 0,1W
3635	4822 051 20109	10Ω 5% 0,1W	3836 4822 051 20474 470KΩ 5% 0,1W
3636	4822 051 20109	10Ω 5% 0,1W	3837 4822 117 10833 10K 1% 0,1W
3637	4822 051 20109	10Ω 5% 0,1W	3838 4822 116 40267 3R3 25% 20V
3638	4822 051 20008	0Ω JUMP. (0805)	3839 4822 051 20104 100KΩ 5% 0,1W
3638	4822 051 20109	10Ω 5% 0,1W	3840 4822 116 83872 220R 5% 0,5W
3639	4822 051 20008	0Ω JUMP. (0805)	3841 4822 051 20474 470KΩ 5% 0,1W
3639	4822 051 20109	10Ω 5% 0,1W	3842 4822 117 10833 10K 1% 0,1W
3640	4822 051 20008	0Ω JUMP. (0805)	3843 4822 051 20102 1KΩ 5% 0,1W
3640	4822 051 20109	10Ω 5% 0,1W	3844 4822 117 10834 47K 1% 0,1W
3641	4822 051 20008	0Ω JUMP. (0805)	3845 4822 051 20102 1KΩ 5% 0,1W
3641	4822 051 20109	10Ω 5% 0,1W	3846 4822 051 20102 1KΩ 5% 0,1W
3643	4822 117 10833	10K 1% 0,1W	3847 4822 051 20471 470Ω 5% 0,1W
3644	4822 117 10833	10K 1% 0,1W	3848 4822 051 20471 470Ω 5% 0,1W
3645	4822 117 10833	10K 1% 0,1W	3849 4822 117 10833 10K 1% 0,1W
3646	4822 117 10833	10K 1% 0,1W	3852 4822 051 20102 1KΩ 5% 0,1W
3700	4822 117 10833	10K 1% 0,1W	3854 4822 117 10834 47K 1% 0,1W
3701	4822 051 20101	100Ω 5% 0,1W	3855 4822 051 20105 1M00 5% 0,1W

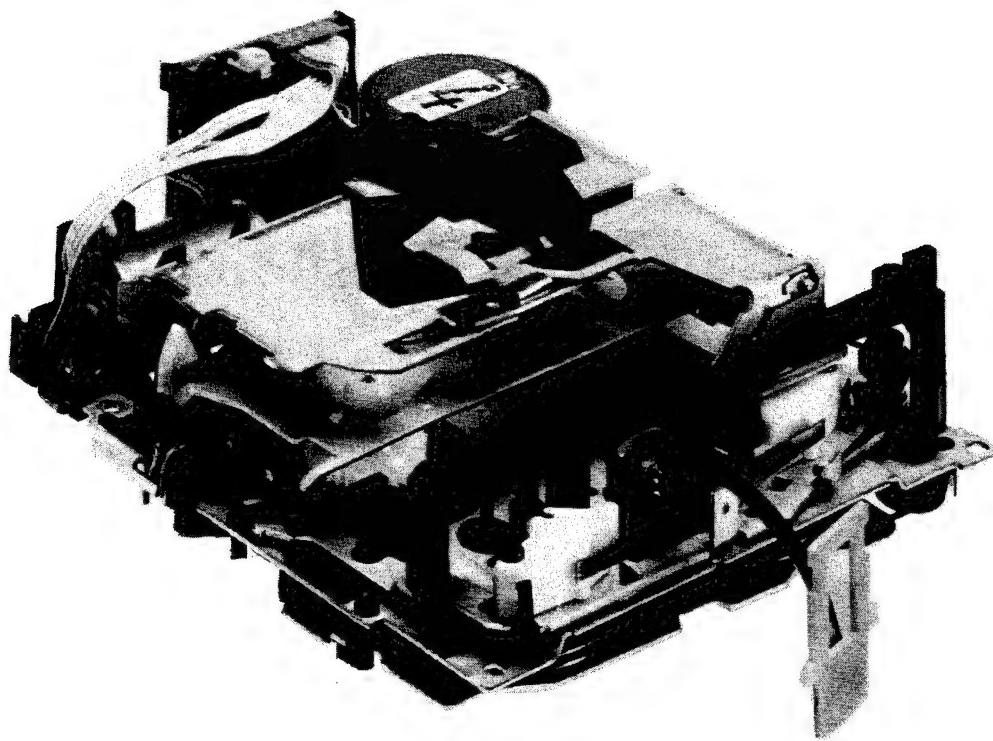
3857	4822 051 20104	100KΩ 5% 0,1W	6610 4822 130 32904 BZV85-C5V6
3858	4822 117 10833	10K 1% 0,1W	6611 4822 130 32904 BZV85-C5V6
3861	4822 051 20008	0Ω JUMP. (0805)	6617 4822 130 83757 BAS216
3862	4822 116 83874	220K 5% 0,5W	6785 5322 130 30684 1N4002RL
3863	4822 051 20104	100KΩ 5% 0,1W	6812 4822 130 83757 BAS216
3864	4822 051 20478	4R70 5% 0,1W	6816 4822 130 83757 BAS216
3870	4822 051 20008	0Ω JUMP. (0805)	6817 5322 130 34337 BAV99
3871	4822 051 20104	100KΩ 5% 0,1W	6818 5322 130 34331 BAV70
3901	4822 051 20122	1K20 5% 0,1W	6819 4822 130 83757 BAS216
3902	4822 051 20122	1K20 5% 0,1W	6820 5322 130 34337 BAV99
3903	4822 051 20122	1K20 5% 0,1W	6822 4822 130 83757 BAS216
3904	4822 051 20122	1K20 5% 0,1W	6901 4822 130 83856 VSL03360
3905	4822 051 20122	1K20 5% 0,1W	6902 4822 130 83856 VSL03360
3906	4822 051 20122	1K20 5% 0,1W	6903 4822 130 83856 VSL03360
3907	4822 051 20122	1K20 5% 0,1W	6904 4822 130 83856 VSL03360
3908	4822 051 20122	1K20 5% 0,1W	6905 4822 130 83856 VSL03360
3909	4822 051 20122	1K20 5% 0,1W	6906 4822 130 83856 VSL03360
3910	4822 051 20122	1K20 5% 0,1W	6907 4822 130 83856 VSL03360
3911	4822 051 20122	1K20 5% 0,1W	6908 4822 130 83856 VSL03360
3912	4822 051 20122	1K20 5% 0,1W	6909 4822 130 83856 VSL03360
3913	4822 051 20122	1K20 5% 0,1W	6910 4822 130 83856 VSL03360
3914	4822 051 20122	1K20 5% 0,1W	6911 4822 130 83856 VSL03360
3915	4822 051 20122	1K20 5% 0,1W	6912 4822 130 83856 VSL03360
3916	4822 051 20122	1K20 5% 0,1W	6913 4822 130 83856 VSL03360
3917	4822 051 20122	1K20 5% 0,1W	6914 4822 130 83856 VSL03360
3918	4822 051 20122	1K20 5% 0,1W	6915 4822 130 83856 VSL03360
3919	4822 051 20182	1K80 5% 0,1W	6916 4822 130 83856 VSL03360
3920	4822 051 20182	1K80 5% 0,1W	6917 4822 130 83856 VSL033

7826	4822 209 12628	HEF4044BT
7827	5322 130 60508	BC857B
7828	5322 130 60508	BC857B
7829	5322 130 60508	BC857B
7925	4822 130 42615	BC817-40
7961	4822 209 16916	P83CE528EFB/023

Service  
Service  
Service

Version 4.4

# Service Manual

12 V 

## MECHANICAL SPECIFICATION

Operating positions: Any position from horizontal to 45° standing vertically on the rear side.  
Operating temperature: -20°C to +70°C  
Tape speed: 4,76 cm/sec  
Wow and flutter: < 0,5% unweighted  
< 0,3% weighted  
Winding time:  
Test tape: RCA 118 ( C60 ) < 110 sec  
Eject and loading time: < 2 sec

## ELECTRICAL SPECIFICATION

Voltage: min 10,6 V max 16,0 V  
Current - playback: 200 mA  
Current - fast wind: 150 mA  
Current - eject, standby: 100 µA  
Hold in voltage: 8,0 V  
Capstan motor: 14,4 V  
Servo motor: 2 V DC Play  
11,5 V DC Fast, Servo  
Playback Crosstalk  
ch. 1 - 2 / 3 - 4 > 36 dB  
ch. 2 - 3 > 46 dB

## FEATURES

The SCA-4.4 tape deck is usable in several sets. Most of the control functions depend on the hard- and software-configuration of the set in which the deck is installed.  
The set µC can control soft eject, emergency eject, standby mode, reverse function, MSS, ME/FE and DOLBY indication.  
Some versions of the deck could be equipped with a grooved head and/or a preamplifier circuit.

## HANDLING AND DEMOUNTING INSTRUCTIONS

### GENERAL

- Protect the tape deck against ESD !
- Plastic catches and snap connections must be released careful with screwdriver or tweezers.
- Cables must be laid in the defined cable guidings after mounting.
- For lubrication see indications in the exploded view.
- To clean tape transport and head only use moist cleaning tapes or piece of cloth, take care that no fluid (alcohol) drops into the bearing.
- For transport lift/carrier assy must be in eject position, do not carry the deck by touching the lift/carrier.
- Use a screwdriver 2,5 mm with insulated shaft for adjusting drift.
- Screw the deck into the set in order: Front right, front left, rear left, rear right.

10. ON/OFF Switch (26)  
 10.1 Desolder connection cables  
 10.2 Lever up switch or push with a small pin through the hole at the bottom of the chassis, directly under the switch if servo motor and clutch were removed previously
11. Control pins (16), gear lever (17), play reverse lever (18)  
 11.1 Remove flywheels acc. 7  
 11.2 Remove play reverse lever  
 11.3 Put control pins into mounting position acc. fig.6-D,E  
 11.4 Take out gear lever  
 11.5 Pull out control pins
12. Switching lever (20), swivel wheel assembly (7,15,43)  
 12.1 Release spring (53) from black plastic pin  
 12.2 Turn switching lever acc. fig.7-A  
 12.3 Lever up switching lever from axle  
 12.4 Remove connection wheel acc. 8  
 12.5 Take out swivel wheel assembly
13. Switching pin (54), transport rod (25), latch (21)  
 13.1 Remove ON/OFF Switch acc. 10  
 13.2 Lever up switching pin from axle  
 13.3 Remove switching lever acc. 12  
 13.4 Move out transport rod and latch

#### TOOLS REQUIRED

Test cassette SBC 420	4822 397 30071
Test cassette SBC 419	4822 397 30069
Friction test cassette	4822 395 30054
Puller for clutch (fig.2)	4822 395 60039

#### ADJUSTMENTS

##### TORQUE OF REELS (FRICTION)

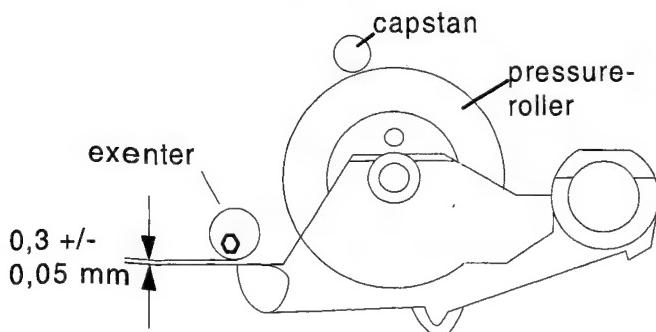
Adjust potmeter pos. 3409 until friction test cassette shows 9,5 +/- 1,5 mNm in NOR direction (after 2 minutes) and 8,5 +/- 1,5 mNm in REV direction. Backtension must be 0,3 to 0,7 mNm.  
If values deviate check lubrication, clutch, take up wheels and backtension springs.

##### WOW AND FLUTTER, TAPE SPEED

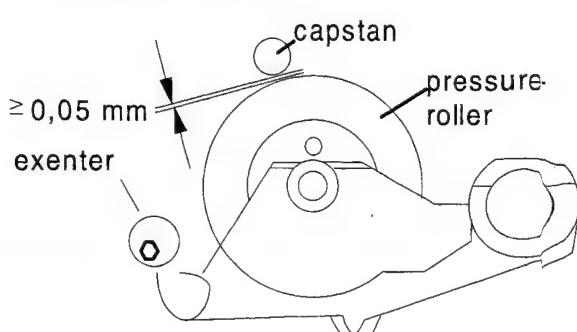
Connect wow and flutter meter to loudspeaker outputs and play the 3150 Hz signal track of test cassette SBC 420. Value should be max. 0,5% (unweighted).  
If value deviates check motors, pressure rollers, flywheels, belt, pulley and backtension springs.  
Tape speed can be adjusted with motor potentiometer A (see fig.8). Use a screwdriver with insulated shaft !

##### PRESSURE ROLLER / CAPSTAN (see figures below)

Adjust clearance play-NOR position between pressure roller and stop head carrier



Adjust clearance FFW position between pressure roller and capstan



EJECTOR 48, HOLDER 49, LIFT 44

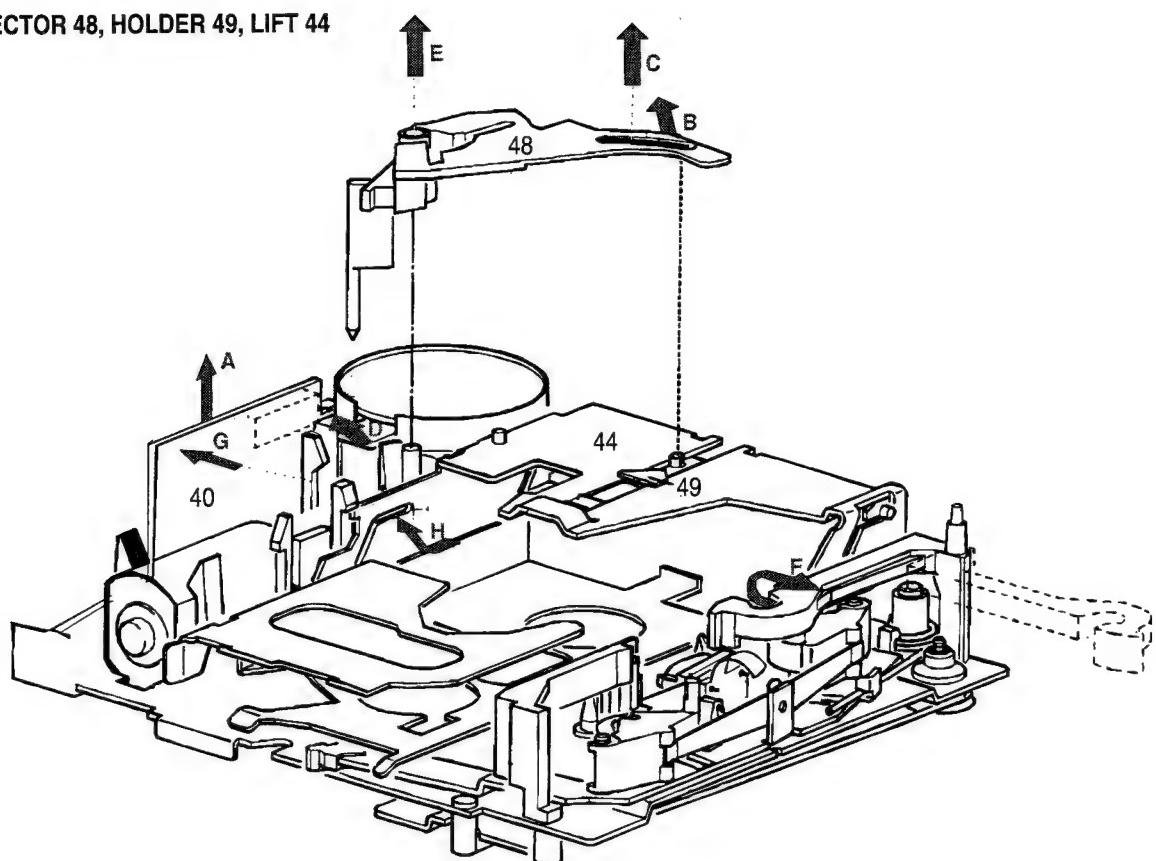


Fig. 1

CLUTCH 59, SWITCH 60, GEAR WHEEL 5, CARRIER 6

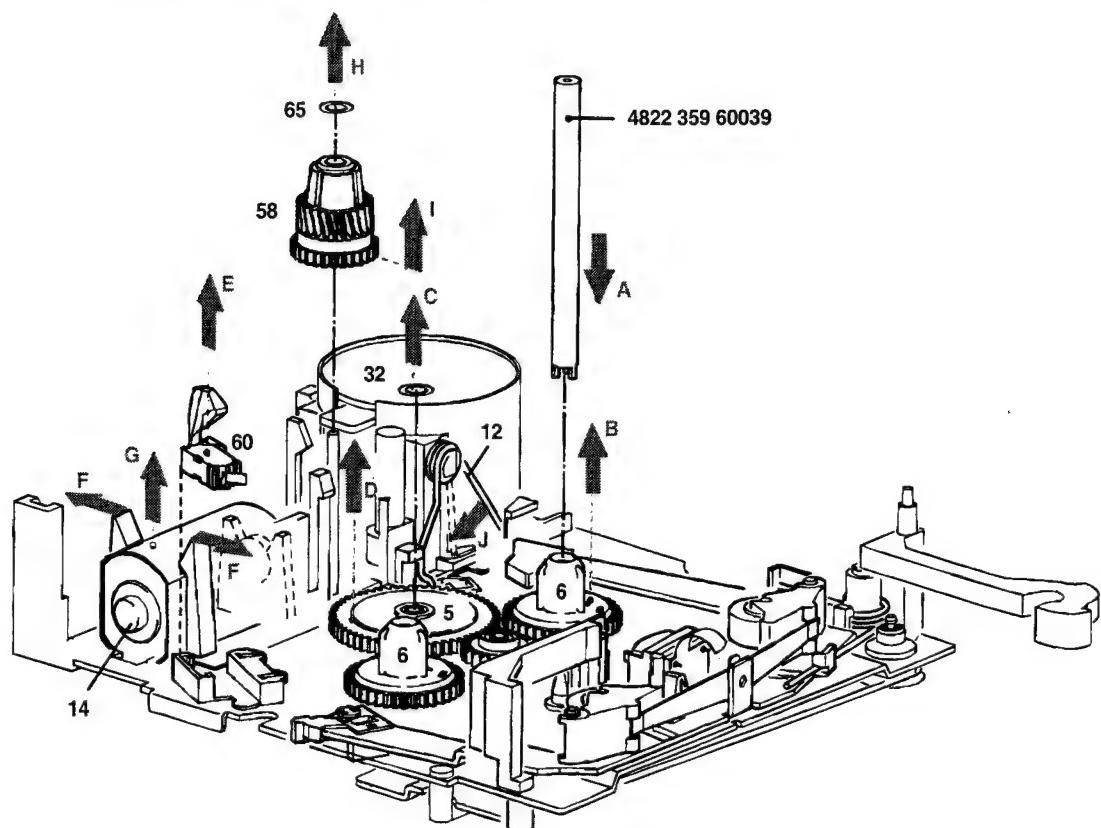


Fig. 2

SCA-4.4

PRESSURE ROLLER 45, HEAD BRACKET 33, HEAD 34

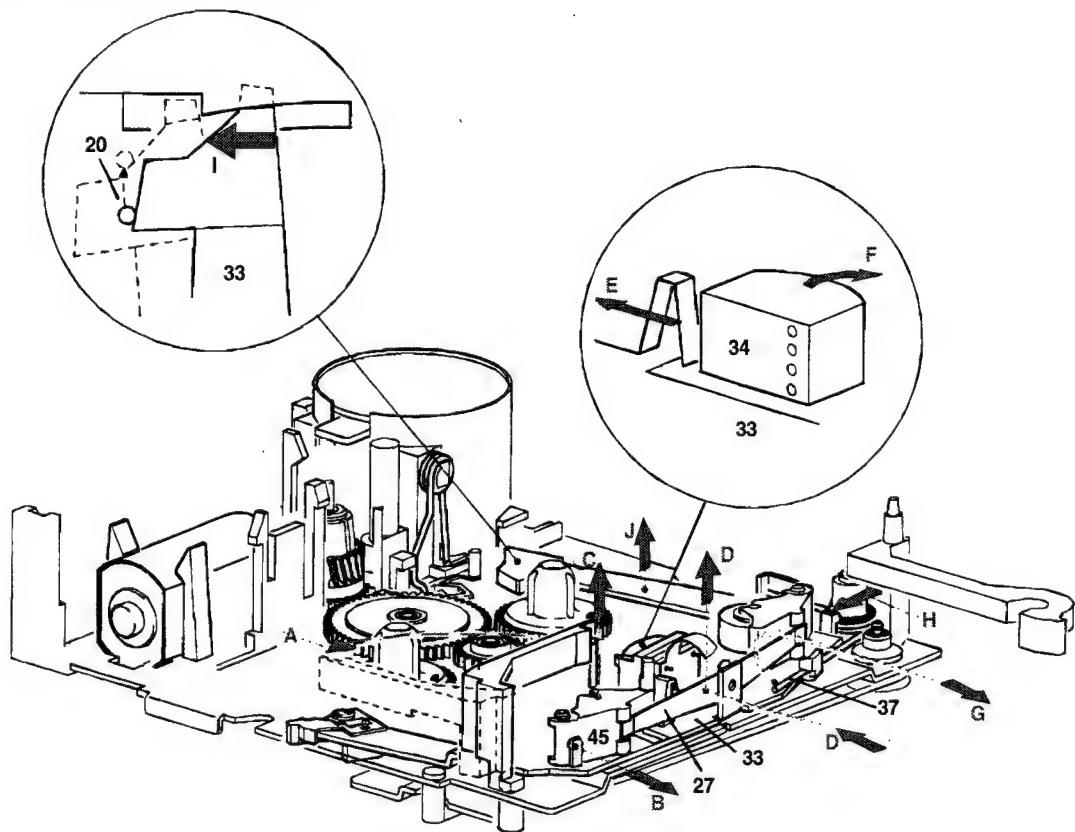


Fig. 3

ANCHOR 3/5, RELAY 1

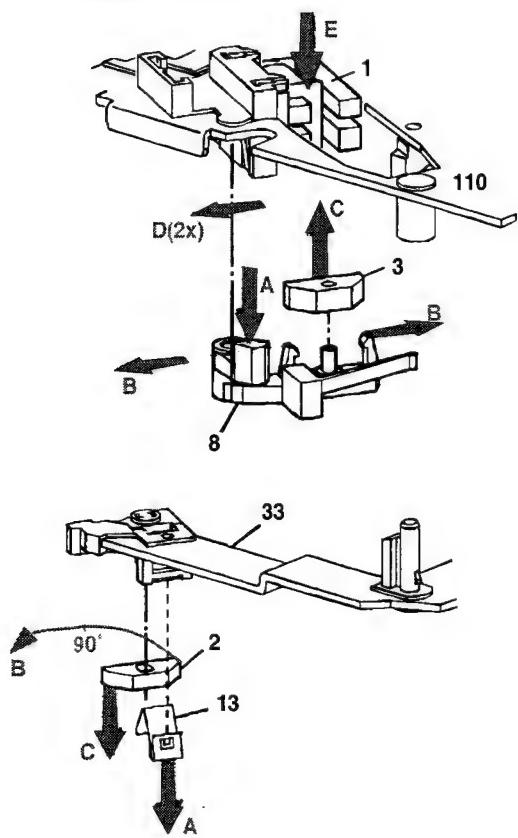


Fig. 4

FLYWHEEL 23, BELT 30

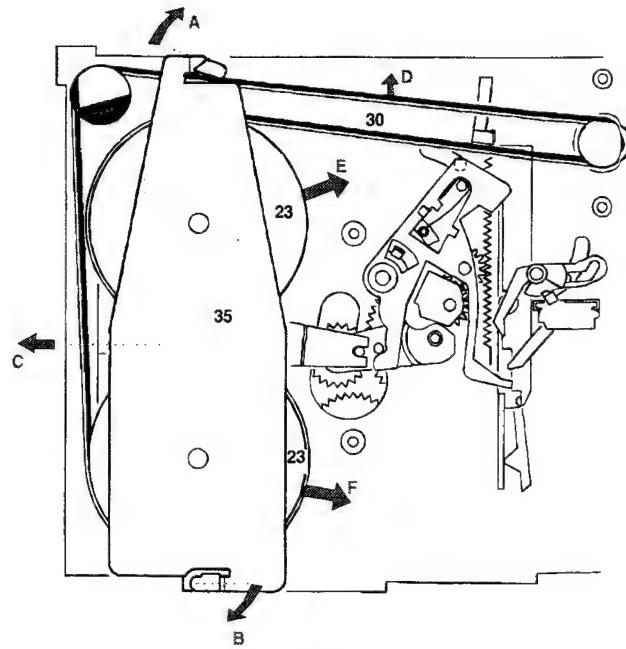


Fig. 5

SEGMENT 16, BRACKET 17, BEARING 70

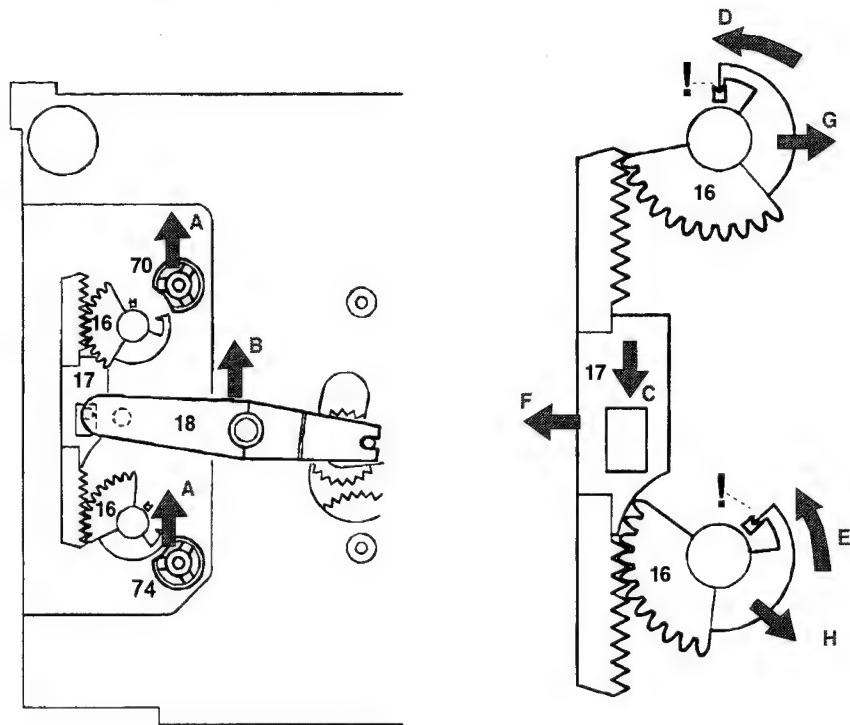


Fig. 6

SWITCH 26, SWIVEL GEAR 7, LEVER 20

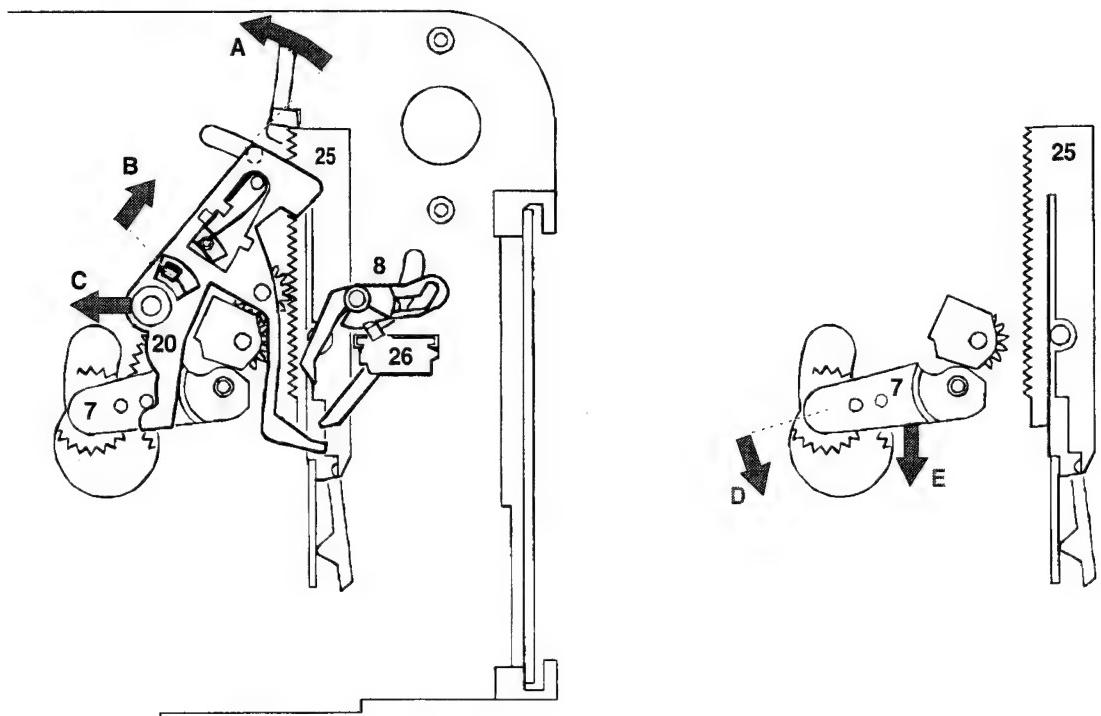


Fig. 7

SCA-4.4

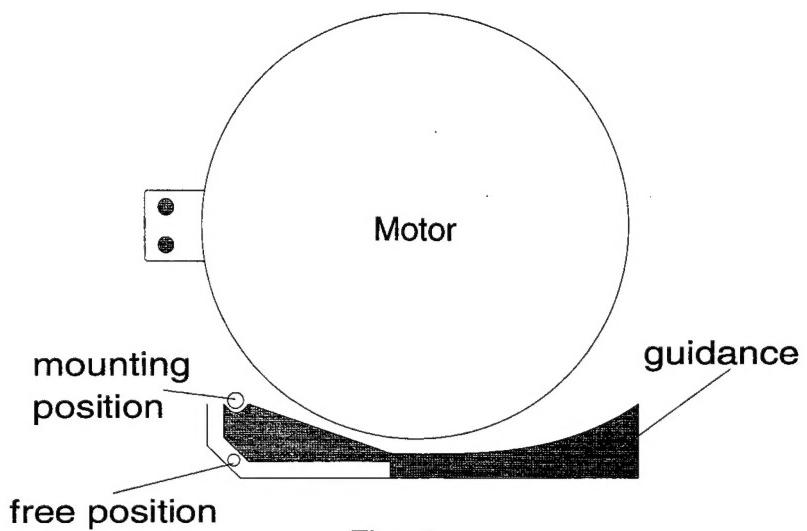
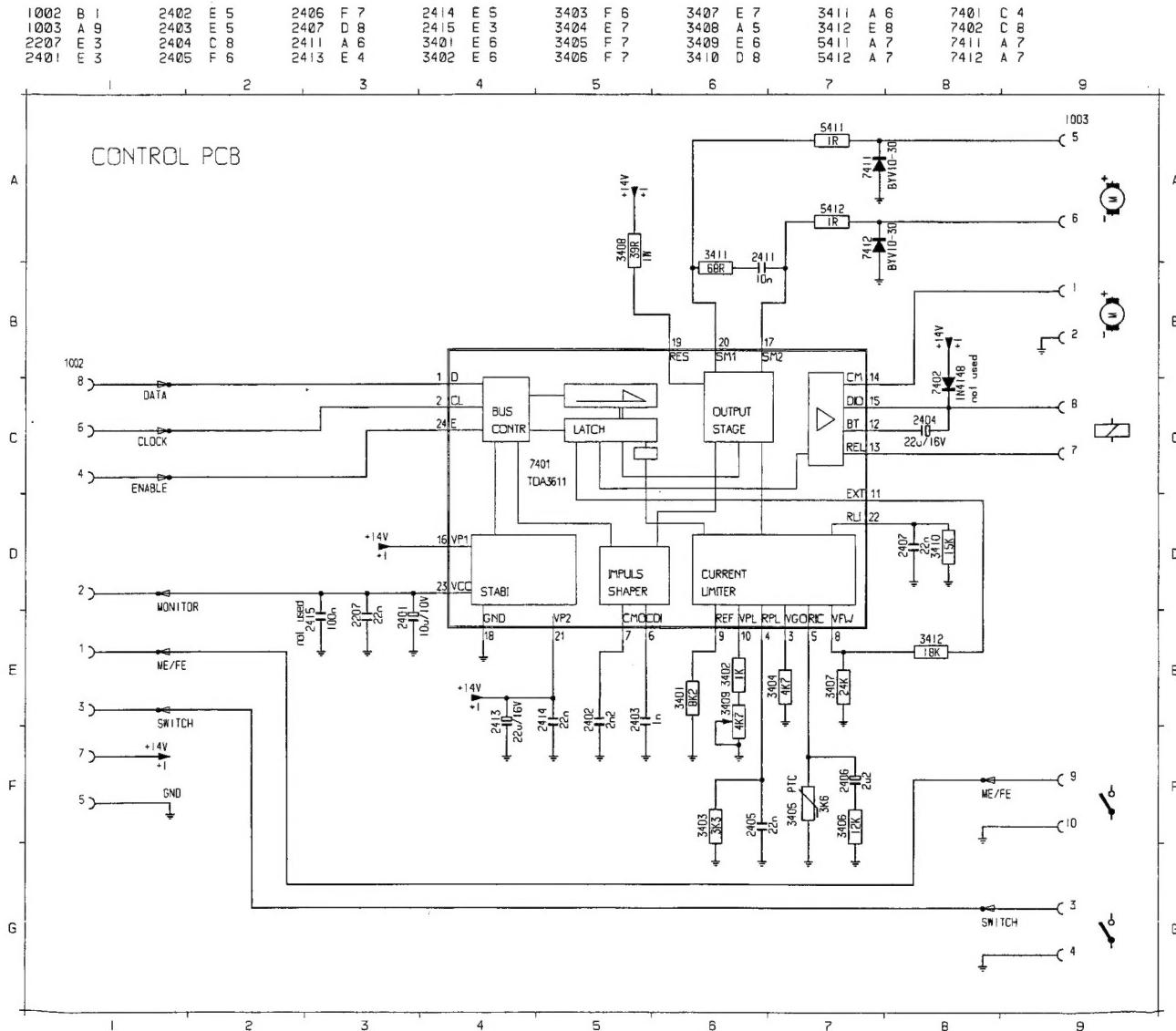


Fig. 8



## MEASUREMENTS ON CONTROL PCB

ME/FE: 0,0 V (FE) / 5,0 V (ME/CR)  
ON/OFF: 0,0 V (ON) / 5,0 V (OFF)

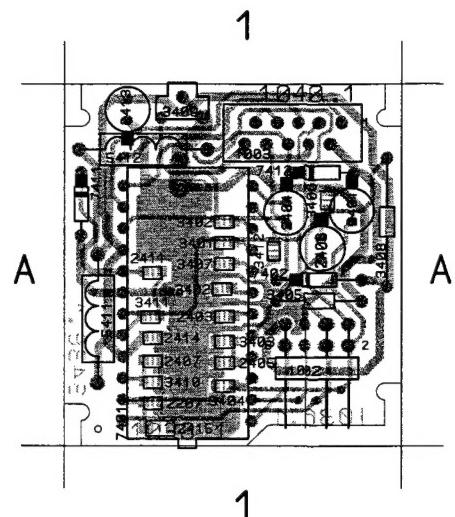
**Pos. 7401 TDA 3611**

- 1: 5,0 V
- 2: 5,0 V
- 3: 0,7 V / 0,0 V (Sb)
- 4: 0,8 V (PN) / 0,9 V (PR) / 0,3 V (W) / 0,0 V (Sb)
- 5: 0,8 V (PN) / 1,0 V (PR) / 0,4 V (W) / 0,0 V (Sb) / 0,1 V (TA)
- 6: 0,8 V (PN) / 1,0 V (PR) / 0,4 V (W) / 0,0 V (Sb) / 0,1 V (TA)
- 7: 0,7 V (P) / 1,8 V (W) / 0,0 V (Sb) / 0,6 V (TA)
- 8: 3,4 V / 0,0 V (Sb)
- 9: 1,2 V / 0,0 V (Sb)
- 10: 0,5 V / 0,0 V (Sb)
- 11: 3,4 V / 0,0 V (Sb)
- 12: 12,0 V
- 13: 0,5 V / 12,0 V (Sb)
- 14: 0,0 V / 11,5 V (P)
- 15: 11,5 V / 12,0 V (Sb)
- 16: 12,0 V
- 17: 0,1 V (PN) / 2,4 V (PR) / 0,0 V (WN) / 12,0 V (WR) / 0,0 V (Sb)
- 18: GND
- 19: 12,0 V / 8,5 V (P)
- 20: 2,4 V (PN) / 0,1 V (PR) / 12,0 V (WN) / 0,0 V (WR) / 0,0 V (Sb)
- 21: 12,0 V
- 22: 3,6 V (P) / 1,3 V (W) / 0,0 V (Sb)
- 23: 5,0 V
- 24: 5,0 V

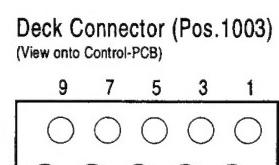
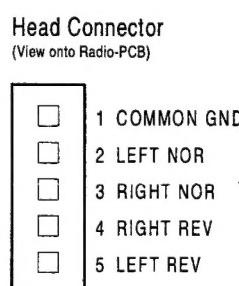
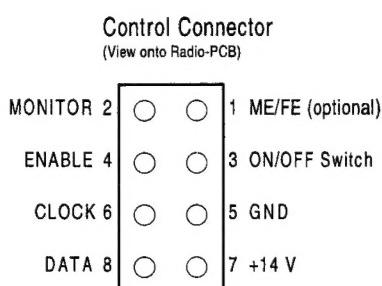
All values measured DC - GND

- (P) = Play mode both directions  
 (W) = Wind mode both directions  
 (PN) = Play NOR direction  
 (PR) = Play REV direction  
 (WN) = Wind NOR direction  
 (WR) = Wind REV direction  
 (Sb) = Standby  
 (TA) = Traffic announcement

1002 A 1	2413 A 1	3400 A 1
1003 A 1	2414 A 1	3410 A 1
2207 A 1	2415 A 1	3411 A 1
2401 A 1	3401 A 1	3412 A 1
2402 A 1	3402 A 1	5411 A 1
2403 A 1	3403 A 1	5412 A 1
2404 A 1	3404 A 1	7401 A 1
2405 A 1	3405 A 1	7402 A 1
2406 A 1	3406 A 1	7411 A 1
2407 A 1	3407 A 1	7412 A 1
2411 A 1	3408 A 1	



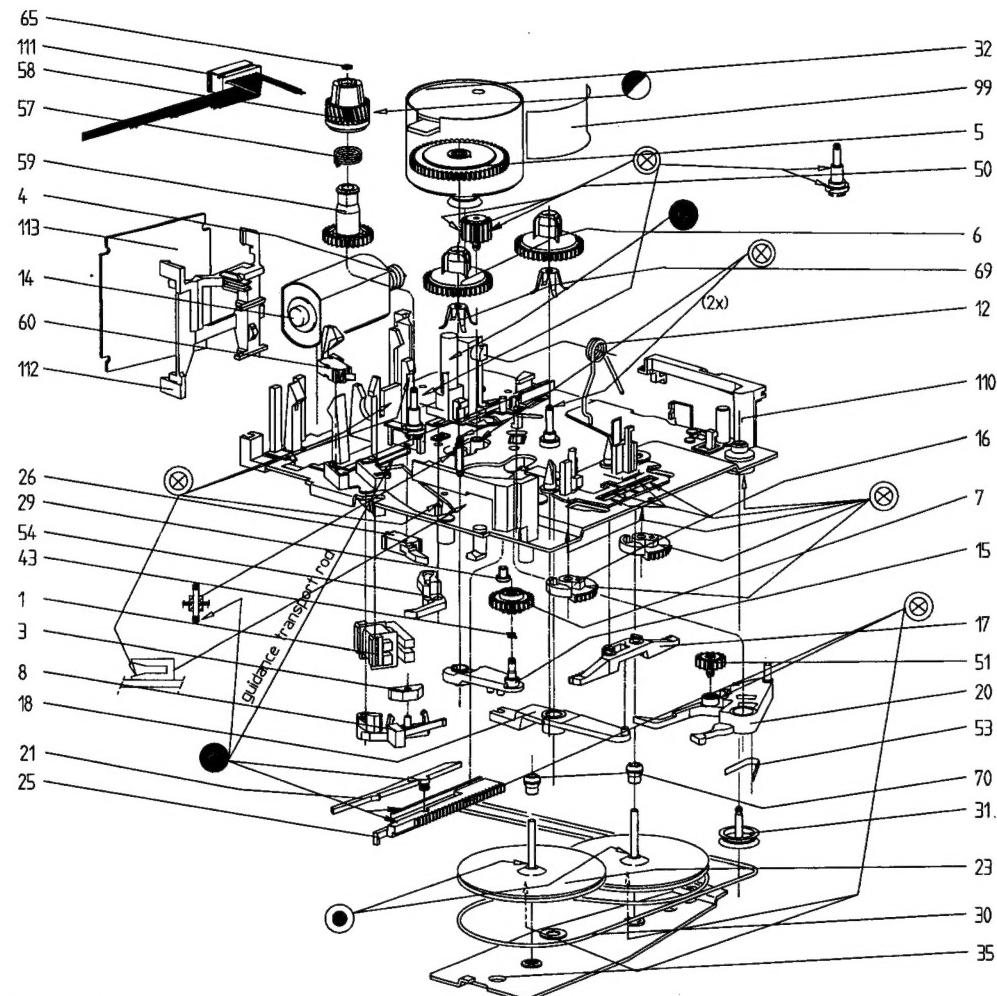
## CONNECTORS



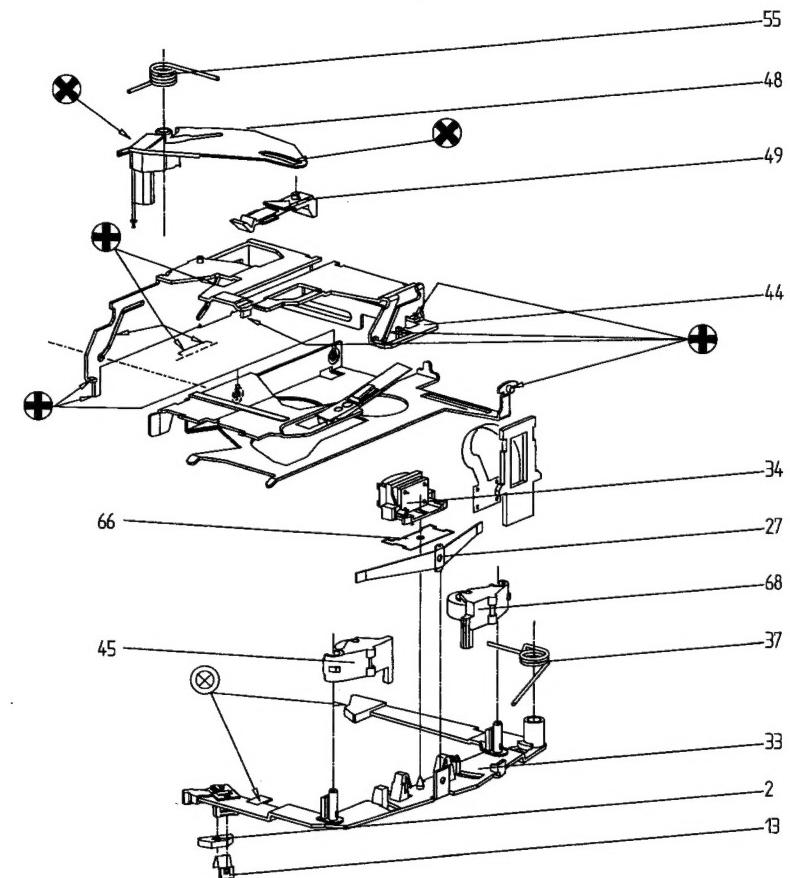
- 1: Capstan +      6: Servomotor -  
 2: Capstan -      7: Magnet -  
 3: ON/OFF Switch    8: Magnet +  
 4: GND              9: ME/FE Switch  
 5: Servomotor +    10: GND

Front of Radio ↓

SCA-4.4



- ⊕ Gleitmo 805 K
- ⊖ Mobil SHC 634
- Contact Oel
- PDP 65
- ⊗ Topas L30
- ⊗⊗ Gleitmo 585 K
- ⊗⊗⊗ SM30 TF



## MECHANICAL PARTS

1	4822 281 11051	DOUBLE
2	4822 404 21083	ANCHOR ON SUPPORT 33
3	4822 404 21084	ANCHOR IN HOLDER 8
5	4822 522 32868	WHEEL IDLER
6	4822 528 10776	CARRIER
7	4822 528 70658	ASSY
8	4822 404 21087	FOR ANCHOR 2
1	4822 492 70556	FOR ANCHOR 2
14	4822 361 30297	SERVO ASSY
16	4822 522 32869	NORMAL/REVERSE
17	4822 404 21089	DRIVING 16
20	4822 404 21086	ASSY SERVO GEARWHEEL
23	4822 528 81378	FLYWHEEL
26	4822 277 11215	ON/OFF
27	4822 492 70557	FOR PRES. ROLLER 45
29	4822 502 12548	FIX MOTOR 32
30	4822 358 31053	BELT, DRIVING
31	4822 528 81144	DIVERTING BELT
32	4822 361 30294	CAPSTAN
33	4822 404 21088	FOR HEAD,PRES.ROLLR
34	4822 249 30157	WITH FLEXPRINT
44	4822 466 82631	FOR CASSETTE
45	4822 528 81377	REVERSE
48	4822 404 21091	EJECT
49	4822 404 21092	HOLDING CASSETTE
50	4822 522 32871	COUPLING
59	4822 522 10435	ASSY
60	4822 277 11216	ME/CR
65	4822 532 52348	FOR CARRIER CLUTCH
68	4822 528 81449	NORMAL
69	4822 492 70926	UNDER CARRIER
70	4822 520 30539	FOR FLYWHEEL
111	4822 321 61954	CABLE, CONNECT
112	4822 256 92048	FOR PCB
113	4822 214 52077	PCB KOMPL.

## ELECTRICAL PARTS

2207	5322 122 32654	22NF10%X7R	63V
2401	4822 124 22748	10UF	10V
2402	4822 122 33127	2,2NF10%X7R	63V
2403	4822 122 33178	1NF 20% X7R	50V
2404	4822 124 23279	22UF20%	16V
2405	5322 122 32654	22NF10%X7R	63V
2406	4822 124 41013	2,2UF	25V
2407	5322 122 32654	22NF10%X7R	63V
2411	4822 122 33177	10NF 20% X7R	50V
2413	4822 124 23279	22UF20%	16V
2414	5322 122 32654	22NF10%X7R	63V
3401	4822 051 20822	8K20	5% 0,1W
3402	4822 051 20102	1K00	5% 0,1W
3403	4822 051 20332	3K30	5% 0,1W
3404	4822 051 20472	4K70	5% 0,1W
3405	4822 116 40241	3K6 PTC	
3406	4822 051 20123	12K00	5% 0,1W
3407	4822 051 20243	24K00	5% 0,1W
3408	4822 053 10399	39R00	5% 1W
3409	5322 101 11014	5K POTMETER	
3410	4822 051 20153	15K00	5% 0,1W
3411	4822 051 20689	68R00	5% 0,1W
3412	4822 051 20183	18K00	5% 0,1W
5411	4822 050 21008	1R00	1% 0,6W
5412	4822 050 21008	1R00	1% 0,6W
7401	4822 209 32207	TDA3611	
7411	4822 130 32911	BYV10-30	
7412	4822 130 32911	BYV10-30	
AIDS AND TOOLS			
100	4822 390 10107	ISOFLEX PDP65	
101	4822 390 20128	TOPAS L30	
103	4822 390 10123	MOBIL OIL SHC 634	
104	4822 390 20027	GLEITMO 805K	
105	4822 390 20128	L30 TF	
107	4822 390 20139	GLEITMO 585K	